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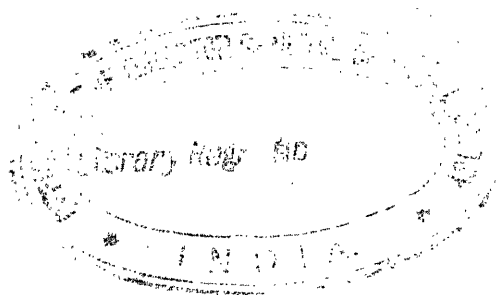
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THE
NUMISMATIC CHRONICLE,
AND
JOURNAL OF THE NUMISMATIC SOCIETY.



THE
 NUMISMATIC CHRONICLE,
 AND
 JOURNAL
 OF THE
 NUMISMATIC SOCIETY.

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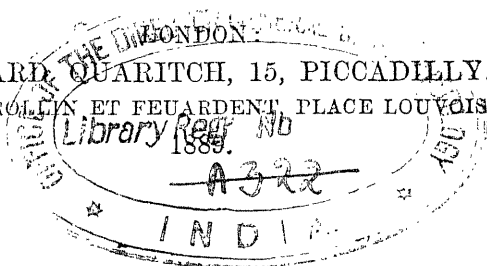
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NUMISMATIC CHRONICLE.

I.

THE "HORSEMEN" OF TARENTUM.

THE general order of the early Tarentine coinages is fairly ascertained. The conformity both in weight and fabric existing between the first incuse pieces of the Dorian city and the earliest coins struck by the Achæan colonies of the Ionian and Tyrrhene shores, tends to show that already before the days of Pythagoras' sojourn within their walls the Italiote Greeks had learnt to federate for their common weal. But while at Metapontion, and perhaps some other cities, these broad-spread incuse pieces, which seem to have owed their origin to a definite monetary convention between the Magna-Græcian Commonwealths, continued to be issued for some time after the destruction of Sybaris, their adoption by the Tarentines was comparatively short-lived. The incuse coins of this city are in fact of excessive rarity. They are of two main types: in the one case [Pl. I. 1] presenting an early version of Taras on his dolphin, in the other [Pl. I. 2] a nude figure of a youth in a half-kneeling pose, holding a lyre and flower, who has with great probability been identified by the Duc de Luynes¹ with the Hyakinthian Apollo. Both these types,

¹ *Annali dell' Istituto, &c.*, vol. ii. p. 340. In rare instances (*Cab. des Médailles*, 1212; Sambon, *Monnaies de la presqu'île Italique*, Pl. xvii. 5) both types are combined, the Apollo in relief, Taras incuse.

if we may judge from the primitive form of the Assyrian border that encircles the design,² go back at least to the close of the period covered by the earliest class of Sybarite coins. And inasmuch as the coinage of Sybaris had begun some time previous to the overthrow of Siris, which city in alliance with Pyxoeis or Buxentum struck incuse pieces on the Sybarite model, we are at liberty to suppose that these earliest Tarentine coins were first issued not long after the approximate date of 560 B.C., when Siris was laid waste by the neighbouring Achæan cities.³

At Tarentum, however, as already remarked, the issue of the incuse pieces must have been of but short duration. From the evidence of finds there can be but little doubt that the first Tarentine types of double relief, those, namely, which exhibit a wheel on one side [Pl. I. 3], were in existence some years before the destruction of Sybaris in 510, and that the first issues of the succeeding class on which a hippocamp appears must have been more or less contemporary with that event.⁴ Next in chronological order

² This primitive rope or guilloche border occurs on some but not on all the coins representing the Hyakinthian Apollo. On the type with Taras on his dolphin it is always found.

³ Justin, *Hist.* l. xx. c. 2.

⁴ In the find made at Sava, not many miles from Taranto, in 1856 (Sambon, *Recherches sur les anciennes Monnaies de l'Italie Méridionale*, Naples, 1863, p. 11), incuse Sybarite coins, fresh from the mint, occurred in great abundance. With these were associated Tarentine coins of the wheel type, both obols and didrachms, some worn, but a great number equally fresh; a quantity of didrachms of the hippocamp type all *fleur de coin*, and two with the head of a nymph also fresh from the die. No incuse Tarentine coins occurred in this hoard, but the coins of Metapontion and Krotôn, found with the others, were all of incuse types: On the other hand, in the Cittanova find, Provincia di Reggio, buried at latest before the end of the sixth century (F. v. Duhn, *Zeitschr. f. Numismatik*, vii. p. 309), we find the relief coinage of Krotôn, Kaulonia, and Laos already beginning. In the Cittanova find Tarentum was only represented by two in-

come the didrachms [Pl. I. 6], presenting on the side opposed to the youthful hero on the dolphin the head in all probability of the local nymph Satyra, the mother of Taras,⁵ eponymic perhaps of an earlier indigenous element than that personified by Taras himself, who, on his father's side at least, was sea-born. At other times the head of Satyra is replaced by that of Taras himself [Pl. I. 5].

The democratic revolution effected in Tarentum in 473 left its mark in a new type exhibiting the Dêmos of the city, impersonated as a seated male figure. This latter class of coins, which includes some of the finest products of the Tarentine mint, has been admirably discussed by Raoul Rochette.⁶ With regard to their chronological arrangement grounds will be adduced in the course of the present study⁷ for dividing them into three main categories, which may be summarised as follows:—

Class I.—Of archaic character (guilloche border), B.C. 473—466. [Pl. I. 7.]

cuse pieces, but it by no means follows that the coinage of double relief had not begun there before the date of its deposition, which from the abundance of freshly struck Sybarite coins could hardly have been later than 510. It is a significant fact that though found in the neighbourhood of Rhêgion no Rhêgian coins occurred in this hoard.

⁵ Schol. ad Virg. *Georg.* ii. 197. Cf. Pausanias, x. 10. "Τάραντα τε τὸν ἥρωα Ποσειδῶνός φασι καὶ ἐπιχωρίας νύμφης παῖδα εἶναι." Satyrion was the name of a locality near Tarentum (Diodoros, viii. 21). There can be no question as to the female character of most of the heads on this group of coins (cf. Carelli, *N. I. V.*, Tav. cv. 46, 48; Garrucci, *Le Monete dell' Italia Antica*, Tav. xcvii. 20, 22. Sambon, *Monnaies de la presqu'île Italique*, Pl. xvii. 6, &c.):

⁶ "Essai sur la Numismatique Tarentine" (in *Mémoires Numismatiques*, p. 167, *seqq.*).

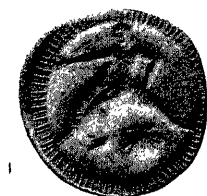
⁷ See p. 32.

Class II.—B.C. 466—460. The seated Dêmos, surrounded by a wreath in conformity with the similar issue struck at Rhêgion to commemorate the triumph of the Democracy there, in all probability with Tarentine help, in 466 B.C. [Pl. I. 8.]

Class III.—The concluding series which seems to have alternated with the earliest equestrian types, and may have extended from B.C. c. 460 to c. 420. [Pl. I. 9—12.]

On the present occasion it is with the more familiar series of the equestrian types which finally superseded the "democratic" class, that I propose more especially to deal. These Tarentine "horsemen," as for convenience they are here designated, number among them the most varied, the most abundant, and in many respects the most beautiful of the Tarentine coinages, and show us the numismatic art of this city in its freest and most congenial developments. This prolific issue, covering two centuries and a half of civic history, exceeds that of all the other Greek coinages of Italy, and is itself a striking witness to the high degree of commercial prosperity attained by Tarentum in days when barbarian inroads and fratricidal enmities were dealing widespread ruin amongst the once flourishing communities that went to make "Great Greece." Here, too, as at Athens and at Corinth, the continuity of type maintained, despite in this case infinite variation of details, throughout so long a period of years, must be regarded as in great measure owing to the conservative instincts of citizens engaged in a widely ramifying trade with distant parts, which led them to adhere to designs that had once secured a currency in the commercial world.

This general unity of type, however, combined with the multiplicity of issues presenting continued variations of pose, attributes, and symbols, has surrounded the study of



c. 550 B.C.



c. 520 B.C.



c. 500 B.C.



5



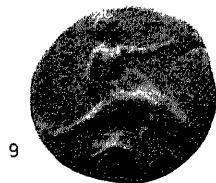
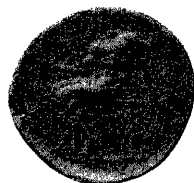
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473 B.C.



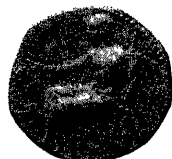
466 B.C.



9



10



11



12

Early Didrachm Types to c. 420 B.C.

these equestrian types of Tarentum with peculiar difficulties. For the best existing record of the types themselves we still turn to the full and generally accurate plates of Carelli's monumental work, which stand out in favourable contrast to the incomplete and inexact representations contained in the posthumous volume recently published in the name of Garrucci.⁸

Owing, however, to the great complexity of the problem and the absence of exact data, no detailed attempt has been made to arrange this long didrachm series into definite chronological periods. Ground has certainly been broken in this matter by Sambon in his researches into the Coinages of Southern Italy,⁹ and by the author of the *Historia Numorum*, so far as

⁸ *Le Monete dell' Italia Antica*. Roma, 1885. It is difficult to condemn sufficiently the gross negligence displayed by those responsible for bringing out Garrucci's book in its present form. Tav. xcvi., which deals with the equestrian types of Tarentum, presents the following errata: 1. *Obv.* Taras holds a plant in place of akrostolion; *rev.* **II** for **A**. 4. *Obv.* **T** in f. omitted. 5. **FE** beneath horse converted into a bulrush (!). 6. *Rev.* **A** beneath horse omitted. 7. *Rev.* **ΠΥ** for **ΓΥ** in f. 9. **T** holds egg? instead of fish. 10. **ΚΑΛΛΙΧ**, for **ΞΑΛΛΩΝΟΞ**. 12. *Rev.* **Μ F E ΑΡΟΝ**, for **ΙΩ Η ΑΡΟΛΛΩ**. 13. *Rev.* **ΗΕΡΑΚΗΝ**, for **ΙΗΡΑΚΛΗΙ**. 16. *Rev.* **ΤΑ**, for **ΞΑ**. 20. **A**, for **F**; *Rev.* **ΔΛ**, for **ΔΑΙ**. 26. *Rev.* **K** in f. omitted. The proofs of the letterpress seem also to have been left uncorrected. All this is the more to be regretted since the engraving of the plates is often exquisite *per se*.

⁹ *Recherches sur les anciennes Monnaies de l'Italie Méridionale*. Naples, 1863, p. 108, *et seqq.* Signor Sambon seems to have been the first to recognise the early date of some of the equestrian types; in several respects, however, it is impossible to follow his general arrangements. The Campano-Tarentine coins, for example, which form a class by themselves, are interpolated as filling a separate Period in the regular didrachm series: and the coins of the time of the Hannibalic occupation are referred to a time previous to the reduction of the didrachm weight, in other words, to a date anterior to Pyrrhus' expedition.

the scope of his work would allow, but some of the most essential chronological stand-points, such as, for instance, the date of the reduction of the didrachm standard, have been hitherto involved in uncertainty. In the course of repeated visits to Taranto itself and other ancient sites of Great Greece, I have had the good fortune to come across several new finds of Tarentine coins, both alone and in association with those of other cities, the comparative study of which has supplied some new data for fixing the chronological succession of the equestrian series. The results thus arrived at have been supplemented by an examination of the Tarentine series in the cabinets of Paris, Berlin, Naples, of our National Museum, and of several other public and private collections, including the rich Hellenic treasury of Dr. Imhoof-Blumer, at Winterthur, to whom, as to many other numismatists and curators, my sincere thanks are owing. The copiousness of the material thus collected has facilitated morphological studies of the numerous varieties of these equestrian types, enabling me in many cases to trace the transformation of the scheme of Taras on his dolphin through regular gradations of change—a form of evidence which often throws a welcome light on the succession of the different issues. In several instances, moreover, it has been possible to bring these didrachm types into direct relation with the gold coinage of the city, as well as with the silver coinage of lesser denominations, and these correspondences have also supplied more than one valuable clue to the chronology of the “horsemen” themselves. In particular, as I hope to show, they enable us to assign a definite date for the reduction of the didrachm standard.

It has been already noticed by numismatists that the

standards of the coins themselves afford a safe criterion for dividing this didrachm series into two main classes. The issues belonging to the first division are all of the full weight of c. 123—120 grains (7·97—7·77 grammes), which answers to that of the earliest incuse coins of the city, while an exceptional piece is said to have been found as heavy as 128 grains.¹⁰ In the second group the weight suddenly falls to c. 102—98 grains, but the date of the reduction of the standard, which marks off this latter series from the others, has hitherto been only approximately fixed.¹¹ Under Period VII., what I believe to be conclusive reasons will be brought forward for believing that the reduction of the didrachm weight coincides in fact with Pyrrhus' expedition in 281 B.C.; and that, further, the silver coinage of Tarentum, so far from breaking off with the Roman occupation of 272, continued without interruption to the period that succeeded the conclusion of the first Punic War. In Hannibal's time the Tarentine silver coinage was once more temporarily revived, with the same equestrian types;¹² the standard adopted, however, being no longer that of the preceding didrachm series, but in all probability that of the original Victoriatus, from which Rome herself had now fallen away, but which was still maintained by the Greek commercial cities on the other side of the Adriatic and elsewhere. In adopting this

¹⁰ Cf. Carelli, *op. cit.*, Deser. No. 113=128·325 gr. (8·314 grammes). 198 and 209=124·365 gr. (8·06 grammes).

¹¹ Mr. Head, in his *Historia Numorum*, places it on general grounds at about 300 B.C.

¹² My own conclusions on this matter entirely coincide with those expressed by Mr. Head (*Hist. Num.* p. 54), so far as the Hannibalic dates of these late types are concerned. I have ventured to differ from him, however, as to the character of the standard adopted.

standard, the Tarentines seem to have associated themselves with other Magna-Græcian communities attached to the Hannibalic alliance, and attention will be called to a small group of coins of the same weight which seem to have been issued at this time by the Metapontines and Lucanians.

The general results arrived at by the evidence thus brought together have emboldened me to distribute the long array of the Tarentine "horsemen" for the first time into successive chronological divisions. No one, indeed, is better aware than myself of the extreme difficulty of the undertaking. In many cases it is impossible to assign more than approximate time-limits to the several classes; while, on the other hand, it is obvious that any grouping of types growing out of each other by gradual stages of evolution involves a constant temptation to cross divisions, the last issues of one period and the earliest of another often overlapping. Arbitrary lines have thus occasionally to be drawn where all in fact is transition. With these qualifications, however, and allowing for the slight overlapping of some of the classes, I venture to believe that future investigators will not find much cause to quarrel, either with the general order of the Periods that I have laid down, or, approximately at least, with their chronological limits. These Periods are as follows:—

FULL-WEIGHT STANDARD, 123—120 GR.

B. C.

I. TRANSITIONAL	c. 450—c. 430
II.	c. 420—c. 380
III. AGE OF ARCHYTAS	c. 380—345
IV. ARCHIDÂMOS AND THE FIRST LUCANIAN WAR	c. 344—334
V. FROM THE MOLOSSIAN ALEX- ANDER TO THE SPARTAN KLEO- NYMOS	334—302
VI. FROM KLEONYMOS TO PYRRHUS	302—281

REDUCED STANDARD, 102—98 GR.

VII. THE PYRRHIC HEGEMONY . . .	281—272
VIII. THE ROMAN ALLIANCE, I. . .	272—c. 235
IX. THE ROMAN ALLIANCE, II. . .	c. 235—228
X. THE HANNIBALIC OCCUPATION . .	212—209

Pollux, as is well known, quotes Aristotle as stating, in his *Tarentine Commonwealth*, that there was at Tarentum a coin called a "nummos," impressed with a figure of Taras riding on a dolphin¹³; and Mommsen¹⁴ has assumed that the description applies to the silver staters or didrachms with which we are principally concerned. It has, however, been suggested by Professor Gardner¹⁵ that Aristotle's description may, with more fitness, be applied to some Tarentine diobols presenting the same type; and the fact that the Romans applied the name of "nummus" to their sestertius, the weight of which was almost identical with the diobol, may certainly be regarded as pointing to this conclusion. There seems to me, however, to be a fatal objection to this interpretation, plausible as it may appear. It is, in fact, almost certain that the silver

¹³ Pollux, ix. 80. "Ἀριστοτέλης ἐν τῇ Ταραντίνων πολιτείᾳ καλεῖσθαι φησι νόμισμα παρ' αὐτοῖς νοῦμμον ἐφ' οὗ ἐντετυπῶσθαι Τάραντα τὸν Ποσειδῶνος δελφίνι ἐποχοῦμενον."

¹⁴ *Hist. de la Monnaie Romaine* (ed. Blacas, i. 141).

¹⁵ *Num. Chron.* 1881, p. 296. The Tarentine "nummos" is probably the "nomos" of the Hêracleian Tables, and one objection urged is that the fine of ten νόμοι incurred according to these for failing to plant an olive-tree in place of one that had died on sacred land rented from the State, would be excessive if a "nomos" = a didrachm. But the argument does not seem to me to be conclusive. A good olive-tree is a valuable possession, and may be estimated in present money at over £4. It must also be observed that the scale of the fines is distinctly high and meant to be deterrent. For constructing a "chaff-store" (ἀχυρίον) of wrong dimensions on the sacred land, the fine was 4 minæ = 400 drachmæ; and for the same transgression in the case of an ox-stall 10 minæ = 1,000 drachmæ.

diobols referred to, with, perhaps, one unique exception,¹⁶ were not struck till after Aristotle's time. Among the smaller denominations of Tarentine coins, the type of Taras riding on the dolphin, though always unusual, is not confined to diobols. It appears on *litraë*¹⁷ and *hêmilitra*, but all of them struck after the reduction of the didrachm standard, which, as I hope to show, took place at the time of Pyrrhus' expedition. The diobols with which this type is associated are of two standards, the one¹⁸ answering to the sixth of the full-weight didrachm of c. 122 grains, the other¹⁹ to the same fraction of the reduced didrachm of c. 100 grains. Both classes are of great rarity. From their type and style they must date from about the same period; and the fact that the lighter obol of the two was struck in all probability after 300 B.C. makes it impossible to refer the earlier diobols exhibiting Taras on his dolphin to a much earlier date. The diobols presenting this type are altogether exceptional pieces, and had any of them been struck at the time when Aristotle wrote, they could never certainly have been cited as typical examples of the standard coin of Tarentum. His description of the Tarentine "nummos" (*if rightly reported by Pollux*) can only refer to the silver staters, by which alone the effigy of the

¹⁶ The diobol presenting the signature $\epsilon\Omega$. See p. 50, *note*.

¹⁷ Cf. Car. T. cxvii. 287, wt. 8.713 gr. *B. M. Cat.* 394, wt. 9 gr. (.583 gramme). Another coin of the same type in my own collection weighs 10 gr. (.648 gramme). This type, with $\alpha\cdot\Uparrow$, is no doubt contemporaneous with a didrachm of Period IX. presenting the same monograms: Car. cxvii. 288, wt. 102.9 gr.; *B. M. Cat.* 392, wt. 99 gr. A *hêmilitron* of the same type, on which Taras is seen holding out a bunch of grapes, is in my own collection. It is somewhat chipped, and weighs only 2.25 gr.

¹⁸ Cf. Car. T. cxvii. 324. Wt. 19.011 gr. (1.23 grammes).

¹⁹ Cf. *B. M. Cat.* 381. Wt. 15.6 gr. (1.01 grammes). Car. cxvii. 325. Wt. 13.466 gr. (.842 gramme).

eponymic hero on the dolphin was rendered familiar to the Greek commercial world.

It must also be borne in mind, as offering a possible explanation of the name of *nomos* or *nummos* being here attached to the silver stater, that in the earliest incuse coinage struck by Tarentum as an adherent of what seems to have been a Monetary Convention amongst the Achæan cities of South Italy, this, so far as we know, was the sole denomination. The incuse fractions struck at Metapontion, Sybaris, and other League Cities are wholly unknown at Tarentum. Even when, in the case of the earliest coinage of double relief, fractions began to be struck, they were struck on a different system from that of the other cities. Whilst in the Achæan colonies the monetary unit was divided on the Corinthian system into thirds and sixths, the early Tarentine divisions are by halves and again by fifths, combining thus the Attic drachm and Syracusan *litra*.²⁰ It follows that the silver stater or didrachm, as we may appropriately call it here, still remained the medium of exchange so far as these other Italiote cities were concerned. It was only from about 380 B.C. onwards that the Tarentine mint began to issue diobols, identical with those of Hêrakleia, which there is every reason to regard as a federal currency.²¹ But these earlier diobols, as already pointed out, do not present the type of Taras on his dolphin, which we are taught by Aristotle to associate with the *nummos*.

The horsemen themselves suggest some interesting enquiries. There can be little doubt that, as pointed out by Raoul Rochette, the type which immediately precedes

²⁰ Cf. Mommsen, *op. cit.* i. 140 *seqq.*

²¹ Head, *Historia Numorum*, p. 55.

the present equestrian series, exhibiting the seated figure—whether we are to regard it as itself representing the Tarentine Dêmos or as Taras as its impersonation—owed its origin to the triumph of the popular party at Tarentum, a triumph due, as we learn from Aristotle,²² to the great slaughter of the Tarentine nobles in a disastrous battle with the neighbouring Iapygians in B.C. 473. Greater difficulty, however, attends the suggestion of Garrucci,²³ that the equestrian type with which we are principally concerned should in turn be regarded as the outcome of a new change of government, which placed the chief authority in the hands of an annual *Stratêgos*. As a matter of fact, it results from the present inquiry that the earliest of the coins presenting the horseman type—struck about the middle of the fifth century B.C.—are altogether devoid of any military characteristics. The youthful rider is seen on these naked and armed only with a whip, and the whole scope of the design is purely agonistic. It is only, as I hope to show, at a distinctly later date, and after fresh alternations of the coins exhibiting the seated Dêmos, that, towards the close of the same century, the more martial type makes its appearance of the horseman with *pilos* on his head and lance in hand, who certainly has a better claim to be regarded as representative of the *Stratêgia*.

Unfortunately, owing to the loss of Aristotle's treatise on the subject, the Tarentine polity remains very obscure, and we know little beyond the fact that it was originally modelled on that of the Spartan mother-city.²⁴ A Taren-

²² Arist. *Polit.* v. 2, 8; and cf. vi. 3, 5. But see Grote (Ed. 1862, vol. iii. p. 564, note).

²³ *Le Monete dell' Italia Antica*. Pt. ii. p. 124, 125.

²⁴ The materials bearing on the Tarentine constitutional history have been collected by Lorentz, *De Civitate Tarentinorum*. Lips. 1833.

tine Basileus is mentioned before the Persian wars,²⁵ and Ephors appear at the Tarentine colony of Hêrakleia. It is also clear that during the time which roughly corresponds to my third Period, when the philosopher-statesman Archytas was exercising a predominant influence on the Tarentine State, his genius did not fail to exercise a modifying effect on the civic constitution. We are told that, contrary to all precedent, his grateful fellow-citizens conferred upon him the annual office of *Stratêgos* seven successive times. Under the guidance of such a man, what Thucydides asserts of Athens under Pericles was no doubt true at Tarentum; and, however nominally a democracy, the government was virtually in the hands of a single eminent citizen. As to the permanent effect, however, of Archytas' rule on the Tarentine Commonwealth we are left in ignorance. The coinage, on the whole, helps us little. The martial type mentioned above is an isolated phenomenon amongst the earlier classes of equestrian coin, and for evidences of preponderating "militarism" in the government we must look to a much later date. It is only from about the time of the Epirote Alexander's expedition that the type of the armed horseman first becomes usual on the Tarentine dies; but when, as I hope to show, at a still later date, towards the close, namely, of the fourth century, the names of magistrates first make their appearance on the coins of this city, there is no reason for supposing that these signatures refer to officials fulfilling the military functions of *Stratêgoi*. The names of known Tarentine *Stratêgoi*, like Agis, whose activity lay within the period when such signatures were rife, are conspicuous by their absence, and on the coins of the Hannibalic

²⁵ Herodotus, iii. 136.

period we look in vain for the well-known names of Nikôn, Philêmenos, and Dêmokratês. It seems, therefore, more probable that the signatures should in each case be referred to the Ephor Epônymos.

The horseman on these Tarentine coins is pre-eminently agonistic, and the cult with which we have to do naturally connects itself with the Heroes and State patrons of the city—with Taras himself or his father Poseidon, with the historic *oekist* Phalanthos, with the Dioskuri as the twin protectors of the Spartan mother-city, with the Amyklæan Hyakinthos. In the youthful rider we may often with great probability recognise Taras himself, and the equestrian contests in which he is engaged may in this case be generally referred to his divine father, from whose prevailing cult Tarentum itself received in later times the epithet of "Neptunian."²⁸ The maturer figures of the armed horseman may often, with equal propriety, be identified with Phalanthos, for while it is quite possible to suppose that Taras should appear in the same boyish form on the dolphin on one side and on the horse on the other, it is impossible to believe that he could be represented on the same coin both as child and man. Bearing this consideration in mind, we are able, in one instance at least, to determine the fact that the armed horseman on the coin stands for the historic, as opposed to the mythic, founder of

²⁸ *Colonia Neptunia Tarentum*. From the Scholiast on Horace, I. xxvii. 28 ("Neptuno sacri custode Tarenti"), we learn that "Phalanthus, Neptune's son," *i.e.* Taras, founded temples at Tarentum to Hercules and Neptune. The cult of Poseidôn at Tarentum was especially connected with Tænaron, and the priests of Poseidôn were in consequence known to the Tarentines as *Tavapιστάι*. (Hesychios Lex. s.v. *Tavapias*, and cf. R. Lorentz, *De rebus sacris et artibus veterum Tarentinorum*. Elberfeld, 1886, p. 8.)

Tarentum. On the coin to which I refer, Type C. (Pl. VI. 10) of my Fifth Period, the reverse of which represents Taras himself as a plump child riding on his dolphin, the horseman of the obverse appears as a helmeted figure holding before him a large round shield, the device on which is a dolphin. The dolphin badge is here explained by the confusion which apparently existed in Tarentine folk-lore between the eponymic hero of the original præ-Hellenic city and the leader of the Parthenian colonists, owing to which the old Phœnician myth of the founder landing on his dolphin seems to have been at times transferred from Taras to Phalanthos. Thus Pausanias, in his account of the Anathêmata at Delphi, the work of Onatas of Ægina and Kalynthos, dedicated by the Tarentines out of a fifth of the spoils taken from the Peuketians and Iapygians, after mentioning that there were statues of both footmen and horsemen, and amongst them the Iapygian king Opis lying slain, continues, "And the two who stand over his prostrate form are the hero Taras and Phalanthos of Lacedæmon, and not far off is Phalanthos' dolphin." To account for this latter feature he further relates the tradition that Phalanthos, having been wrecked off the port of Delphi on his way to Italy, consulted the oracle, in accordance with which he was safely conveyed to his destination on a dolphin.²⁷

The dolphin was thus a symbol of Phalanthos as well as Taras, and its appearance on the shield of the warrior on the above-mentioned coin may be taken as a clear

²⁷ Pausanias, lib. x. c. 13. "οἱ δὲ αὐτῷ κειμένῳ ἐφεστηκότες ὁ ἥρωας Τάρας ἐστὶ καὶ Φάλανθος ὁ ἐκ Λακεδαιμόνος καὶ οὐ πόρρω τοῦ Φαλάνθου δελφίς· πρὶν γὰρ δῆ ἐς Ἰταλίαν ἀφικέσθαι [καὶ] ναυαγία τε ἐν τῷ πελάγει τῷ Κρισσαίῳ τὸν Φάλανθον χρῆσασθαι καὶ ὑπὸ δελφίνος ἐκκομισθῆναι φασιν ἐς τὴν γῆν." (Cf. too Justin, lib. iii. c. 4.)

indication that Phalanthos is there represented. There is every *à priori* ground for believing that the historic founder of Tarentum should have been commemorated on the Tarentine coinage. The Tarentines, as we know, in return for the patriotic fraud by which the dying Phalanthos had secured the perpetual duration of the city, decreed him divine honours.²⁸ Judging, indeed, by analogy, we should be inclined to refer to this hero most of the figures of armed horsemen that appear on the present series. It is extremely probable that the interesting type [Pl. II. 5] already referred to of the horseman in peaked pileus and Doric *chiton* is to be regarded as an earlier representation of the leader of the Lacedæmonian colonists. The head-gear worn by the horseman strongly supports this attribution, since one of the principal incidents in the story of Phalanthos connects itself with the conical cap which he wore on his head, and the taking off of which was to be the signal for the rising of the Parthenian conspirators.

The twin figures that appear on some of the Tarentine coins must, of course, be identified with the Dioscuri; on a gold stater, indeed, presenting this device [Pl. V. 9] the inscription ΔΙΟΣΚΟΡΟΙ is seen in minute letters above the riders. It is highly probable, as I hope to have occasion to point out, that the first appearance of this type contains a direct allusion to the alliance with the Spartan mother city, and is to be referred to the date of Akrotatos' expedition. It is certain that in some of the single riders on the Tarentine didrachms we may also detect at times one or other of the Lacedæmonian twins.

The hippic deities of Tarentum are referred to on an

²⁸ Justin. *Hist.* lib. iii. c. 4.

inscription in which they are associated with those of the sea, as receiving the thank-offerings dedicated from the Roman spoils after the naval victory of Krotôn in 210 B.C.²⁹ The best illustration of these equestrian coin-types has, however, been supplied by the recent discovery of a vast deposit of votive terra-cotta figures on the site of a sanctuary of Chthonic divinities within the walls of the outer city of Tarentum. Many of these terra-cottas, as I have already pointed out elsewhere,³⁰ supply the closest parallels to familiar types of Tarentine horsemen as they appear on the coins. In some cases we have identical figures of the Dioscuri, in others a naked warrior in a peaked-crested helmet is seen seated sideways on a galloping steed [Pl. XI. 12 and 13], holding in his left hand the large round shield which is so frequent a concomitant of the equestrian figures on the coins. In another instance a youthful figure, shield in hand, is seen standing in front of his stationary horse laying his right hand on its neck, a scheme which finds its counterpart in a coin of Period IV. [Pl. IV. 4], where, however, the warrior stands behind his steed. A still more striking resemblance is to be found in another characteristic type of these votive terra-cottas, in which the rider is seen with his knee bent under him, as if in the act of vaulting from his horse, a design which reappears on a whole series of Tarentine coins.

²⁹ The inscription in the form given by Carducci, in his *Commentaries on Aquino* (*Delizie Tarantine*, l. i.) p. 111, 112, runs as follows: "Νικητήριον καθ' ἑκαστον ἐναντὶν Θεοῖς Θαλασσίους καὶ τοῖς Ἱππίοις Θεοῖς ἢ Βουλῇ καὶ ὁ Δῆμος τῶν Ταράντινων διὰ τῆς προνοίας τοῦ Δημοκράτους Ἐνωμοτάρχου ἐκ τῆς εὐχῆς πολεμικῆς νεολαίας." Cf. Fiorelli, *Bull. dell' Inst. Arch.* 1841, p. 174. For this naval victory see Livy, l. xxvi. c. 39.

³⁰ *Hellenic Journal*, 1886, p. 8, 22, 23. ("Recent Discoveries of Tarentine Terra-cottas.")

These parallels occurring on a group of objects devoted to a Chthonic cult with which, together with the infernal deities, were associated the deified heroes of Tarentine religion, form a valuable commentary on the coin-types with which we are concerned, and afford additional grounds for supposing that the agonistic exercises performed by the horsemen before us connect themselves with a similar heroic cult. Several of the symbols that appear on some of the earliest of these equestrian types, such as the caduceus, or the bearded Herm, in front of the horse, the *kantharos*, or, somewhat later, the *kylix*, that is seen below, are best explained in this Chthonic connexion. The *kylix* especially, which on a coin of my Third Period (Type E.; Pl. III. 9) appears beneath the type, already described, of the warrior vaulting off his horse—in this case probably the heroized Phalanthos—had at Tarentum a distinctly sepulchral association. From an epigram of the poet Leônidas it appears that it was an usual practice to place a *kylix* above a grave, originally, no doubt, with the idea of receiving libations for the departed.³⁰ The *kantharos*, on the other hand, is even more intimately associated with the old heroic cult of Tarentum and its mother city. In the votive terra-cottas above referred to it is seen in the hands of the recumbent figure of Aidoneus, or the Chthonic Dionysos, who symbolizes on these the heroized departed. Its appearance in the hands of the seated figure on some of the earliest types of the preceding

³⁰ *Leonida Tarentini*, c. lxxxvii., where the deceased Maronis, who in her life had been fond of her cups, is made to lament below, not for husband or children, but because the well-known Attic *kylix* laid on her grave ("ἡς ὑπὲρ τάφου γνωστή πρόκειται πᾶσιν Ἀττικὴ κύλιξ") is empty. The practice of placing a drinking vessel over the grave is still common in Eastern Europe.

didrachm series is also very suggestive. Although this figure has with great probability been regarded as an impersonation of the Tarentine Dêmos, it is none the less true that this personification was itself assimilated to the idea of the heroic founder. It is indeed difficult to say where Taras ends and abstract Dêmos begins. There is a striking parallelism between some of the more archaic coins of this type (Pl. I. 7) in which the seated figure holds out a wine-cup as if for oblations, and the old Spartan sepulchral reliefs in which the heroized departed is seen seated in much the same attitude on a similar throne and holding out a *kantharos* in the same manner as the figure on the coin. In one case, at least (Pl. I. 11), the heroic character of the seated figure is deliberately emphasized by the introduction of a tomb or sepulchral altar in front of it, a feature which Raoul Rochette has, perhaps unnecessarily, brought into connexion with the tomb or *hêrôon* of the Amyklæan Hyakinthos, a prominent object outside the walls of Tarentum. The same author,³¹ after calling attention to the sepulchral associations of the Ionic column as it appears on a whole series of vases and other monuments, adduces strong reasons for believing that the Ionic capital, which

³¹ *Journal des Savants*, 1833, p. 154. "Je puis affirmer, d'après ma propre expérience, que la colonne ionique représentée sur les vases peints, soit qu'elle y figure isolément, soit qu'elle s'y trouve employée dans la composition d'une édicule, s'y rapporte toujours à une intention funéraire," &c. Avellino, *Adnotationes in Carellii Num. It. Vet. descript.*, prefers to see in this symbol a badge of a magistrate. In the case of some of the equestrian types it certainly occurs at a period when such personal devices were frequent on Tarentine coins (v. *infra*, p. 26). In the case, however, of the earlier "democratic" type on which this symbol also occurs, this explanation is not admissible, since the symbols and attributes on this early class seem solely to connect themselves with the seated impersonation of the Dêmos.

on some of these equestrian coins appears below the figure of the victorious rider, crowning himself in token of victory, must also be taken to indicate the funereal character of the contest commemorated by the type. The same symbol also occurs beneath the feet of the seated figure on a coin belonging to the earlier "Democratic" class, where it stands as the visible emblem of heroization.

As illustrations of the various equestrian games in honour of the state patrons of Tarentum the long didrachm series with which we are concerned has a special value. This ever-changing succession of hippic types gave artistic expression to the passionate love of the turf which was so distinguishing a feature of Tarentine public life. The rider, whether to be interpreted as Taras or not, is often a mere jockey who urges his steed forward to the goal, or crowns or grooms the winner. In some of the later examples we have still more sensational types of the boy rider borne onwards in a headlong gallop, hanging literally to his horse's neck, or reaching forwards the torch of the Lampadêdromia. The type, already referred to, of the *apobates* vaulting from his horse represents what was evidently a familiar exercise of the Tarentine horsemen; and in another instance we trace in the youthful rider leading a second horse a reference to the *ἄμφιπποι* or *desultores*. Other types, on the other hand, throw a light on exercises of a more military character. We recognise the lancers described by Ælian³² and Suidas³³ and known as "Tarentines," of which there was more than one variety. They are often represented with three javelins, two of which we are informed they hurled at a distance, while the

³² Ælianus Tacticus. *Statêgêmata*. Ed. Robertelli. Ven. 1552, p. 3.

³³ Suidas, s. v. Ἰππική.

third was reserved for close quarters; ³⁴ usually, too, they bear a large round shield, from the whiteness or brilliance of which the flower of the Tarentine cavalry were known as Leukaspides. On one of the most spirited of the later didrachm types there occurs an example of another class of Tarentine horsemen, the "Hippakontists," who aimed their darts from afar but did not come to close quarters. ³⁵ It is also by no means improbable that the agonistic type of the ἄμφιππος already referred to throws a light on the evolutions of the Tarentine knights in Philopœmen's following, each of whom, according to Livy, ³⁶ led with him a second horse. There can be little doubt, moreover, that the scheme of the rider with his knee bent under him as if in the act of vaulting from his horse must be taken to illustrate military as well as agonistic manœuvres. At times indeed he appears armed with a spear and round shield, and as if equally prepared for combat on horseback or on foot. The natural sequel to this representation is in fact to be seen on some fragments of a frieze of a good period from the Corinthian temple recently discovered in the old Tarentine Akropolis, ³⁷ where a youthful warrior

³⁴ Ælian, *loc. cit.* "Τινὲς δὲ τῶν Ταραντίνων ἐλαφροῖς δορατοῖς χρῶνται· ἀπαξ τε ἢ δὶς προεξακοντίσαντες τὸ λοιπὸν συμπλέκονται τοῖς πολεμοῖς ἐγγύθεν ἀπομαχόμενοι." Suidas makes them fight at close quarters with swords or axes, but from the coins we gather that they used a spear or lance.

³⁵ Suidas, *loc. cit.* "οἱ μὲν μόνον ἀκοντίζουσιν, εἰς δὲ χεῖρας τοῖς πολεμοῖς οὐκ ἔρχονται καὶ καλοῦνται ἵππακοντισταί, καὶ ἰδίως Ταραντῖνοι." Cf. Period IX., Type C (Pl. X. 8); Period X. [Pl. X. 12].

³⁶ *Hist. lib. xxxv. c. 28.* "Quos Tarentinos vocabant equites binos secum trahentes equos, ad prima signa misit." In this and other passages it is not necessary to infer that the cavalry employed actually came from Tarentum, but that they were exercised and equipped in the Tarentine manner.

³⁷ *Memorie della r. Accademia dei Lincei*, 1881, tav. ix.; and

with flowing tresses; clad in a chlamys and armed with a spear and round shield, is seen fighting on foot beside his horse.

The appearance of these more martial types among the horsemen no doubt coincides with periods of warlike activity on the part of the Tarentine State. At times too, Taras on his dolphin himself assumes a bellicose attitude, and is depicted dart in hand or rising in a warlike fury on his marine charger, preparing to fit an arrow to his bow. This type recurs more than once in the numismatic annals of Tarentum, but in one instance at least the historic import of the design is fixed from its association with the Pyrrhic elephant.

It is naturally to the reverse type of these coins (as for convenience' sake we may regard it) presenting Taras on his dolphin that we turn for the clearest allusions to the current events of Tarentine story, for here both the attitude and attributes of the principal figure as well as the symbols in the field are brought into direct relation with the personified City. It must of course be borne in mind that in dealing with Greek numismatic art we are rarely able to read off at first sight and without further clue the historic meaning of a design. We have not here to do with the labelled trophies of a Roman medal. Much we can cer-

see *Hellenic Journal* (vol. v.), 1884, p. 3, note, where I have endeavoured to combat the theory, that the warrior in question must necessarily be regarded as a barbarian. His free flowing hair and round unornamented shield present, on the contrary, the closest analogy with some of the heroic figures on these equestrian coins. Even if we regard him as one of Tarentum's barbarian neighbours, it must still be remembered that the manoeuvres of the Tarentine knights were probably in large measure derived from the horsemanship of the indigenous population, of whom "*Messapus equum domitor*" stood out as the eponymic representative in Italian tradition.

tainly never know. Even the altered pose of Taras on his dolphin, his restfulness or his agitation, was pregnant perchance, with the idea of peace or war to those amongst whom each new issue first circulated. Arguing from the known to the unknown we have just grounds for supposing that many of the types and symbols contain a reference to passing events clear enough at least to be intelligible to contemporaries and Greeks. Nor was there ever surely a succession of types better fitted for the exercise of this allusive faculty than the Tarentine series, in which both the obverse and reverse designs seem specially chosen with a view to infinite variation, without prejudice to the general unity of effect. For a space of some two centuries and a half, the Tarentine didrachms, while preserving the essential character of the type unaltered, presented such a succession of changing attitudes and ever new combinations of type, attitudes, and symbols, as is without a parallel in the coinage of any other Hellenic city.

In some cases the references to current history are obvious enough. It is impossible, for instance, to doubt that the elephant which occurs in the exergue of the archer type referred to, connects itself with Pyrrhus' expedition, while the figure of Athênê Alkis that is seen beneath the dolphin on coins of smaller denomination and on the field of the contemporary gold staters is an equally clear allusion to the same episode. The nearer chronological arrangement of the equestrian series, so far as I have been able to arrive at it by the comparative study of recent finds as well as by the morphological succession of the types themselves, has emboldened me to trace direct allusions to other episodes of Tarentine story, and in particular to the Spartan alliance under Archidâmos, and again under Akrotatos, to the expedition of the

Molossian Alexander, and even to the financial assistance rendered to Pyrrhus and the Tarentines by Antiochos I.

In considering the interpretation of the various symbols that appear in association with the eponymic hero of Tarentum in the present series, regard must in the first instance be directed to the period to which they belong. In the earliest classes of equestrian types struck between the approximate dates of 450—350 B.C., as, indeed, on the more archaic types of Tarentine coins, the figure of Taras on his dolphin is in no case associated with a symbol in the field. The marine objects that appear below the dolphin,—the scallop or the purple-shell, the cuttlefish or the tunny,—may themselves be regarded as an integral part of the type, and as representing, like the curling waves that sometimes replace them, at times the little inner sea of Tarentum, at times the open Ionian waters, on the produce of both of which the life and industries of the city were so largely dependent. The trident and harpoon, the oar or akrostolion in Taras' hands refer to the mythic founder as patron of the Tarentine fisheries and naval power; the arms or wreath evince his tutelary influence over war and games. It is only from about the middle of the fourth century onwards that symbols begin to appear in the field, in some of which, such as the Molossian eagle, as well as in others, like the prow and anchor or the elephant already referred to, that appear below the dolphin, we may trace a more definite allusion to current events. A greater variety is at the same time observable in the symbols or attributes held in Taras's hand; and Eckhel's conjecture³⁸ that many of these refer

³⁸ *Doctrina Numorum*, I. p. 146. For the Tarentine religious celebrations see especially R. Lorentz, *De rebus sacris et artibus veterum Tarentinorum*. (Elberfeld, 1836)

to the numerous games and religious celebrations for which the city was famous,³⁹ must at least be partly true. Taras himself, as I hope to show, is occasionally assimilated in a curious way to the various divinities whose cult he is represented as honouring. At times he assumes not only the trident but the attitude and mantle of his father, Poseidôn; he is seen with Apollo's locks and the flower of Hyakinthos, or is metamorphosed into the infant Dionysos of the Mysteries.

The analogies supplied by the Hêrakteian Tables have led Mazocchi⁴⁰ and others to see in a large number of symbols on Tarentine coins an allusion to the Eponymic magistrate of the year. On the Hêrakteian Tables, before the name of the individual *ὀριστής* or *πολιανόμος* and after the initials of his tribe or *ὄβας*, there is inserted the description of his distinguishing badge or symbol, such as a trident, a bunch of grapes, a flower, a caduceus, a tripod, or some similar device.⁴¹ It is obvious that many of these badges present a close correspondence with the symbols that appear on the coins of Tarentum, itself the mother city of Hêrakteia; and the occurrence of certain *types parlants* and of symbols presenting an obvious play

³⁹ Cf. Strabo, vi. c. 4, who says that the Tarentines had more public festivals than there were days of the year.

⁴⁰ Mazochii, *Commentt. in aneas tabulas Heracleenses*, p. 150. Cf. Avellino, *Adnotationes in Carellii Num. It. Vet. descript.* p. 57.

⁴¹ *F.g.* **ΞΕ ΤΡΙΠΟΥΣ ΦΙΛΩΝΥΜΟΣ ΞΩΡΥΡΙΣΚΩ. ΠΕ ΚΑΡΥΚΕΙΟΝ ΑΠΟΛΛΩΝΙΟΣ ΗΗΡΑΚΛΗΤΩ. ΑΙ ΠΕΛΤΑΙ ΔΑΣΙΜΟΣ ΡΥΡΡΩ. ΚΝ ΘΡΙΝΑΞ ΦΙΛΩ. ΤΑΣ ΗΣΤΙΕΙΩ. ΜΕ ΕΡΙΣΤΥΛΙΟΝ ΗΗΡΑΚΛΕΙΔΑΣ ΞΩΡΥΡΩ**, &c. Mazoch. *Tab. Heracl.* p. 147, *seqq.* At Hêrakteia these badges appear to have descended from father to son; thus Bormiôn, the son of Philôtas, of the tribe Me . . . and Arkas, the son of Philôtas, of the same tribe, both appear with the same symbol of a *κιβώτιον* or box.

on official signatures found on the same piece, shows that many of the symbols that appear during the later periods of the Tarentine coinage must be connected with the names of magistrates.⁴² On a piece signed **ΛΕΩΝ**, for instance, the lion appears beneath the dolphin on the reverse. The name **ΟΛΥΜΠΙΞ** is associated with the wreath of an *Olympionika*, **ΑΡΟΛΛΩΝΙΟΞ** with solar emblems, and **ΔΑΙΜΑΧΟC** attaches the name to a type in which the galloping rider holds forth the torch (*δαῖς*) of the *Lampadêdromia*. Another evidence of the connexion of certain symbols with magistrates' names is to be found by a comparison of didrachms and drachms on which the same names reappear in association with the same symbols but with a different type. The name **ΤΙΞΤΙΑΡΧΟΞ** is in this way doubly connected with a bunch of grapes, a symbol which also appears on the Hêracleian Tables. The name **ΑΡΙΞΤΙΞ** is in the same manner linked with an anchor on coins of both denominations. In another example we find the abbreviated signature **ΞΩ**, perhaps in this case belonging to a moneyer or engraver rather than a higher official, placed in minute letters between the horns of a *bucranium*, evidently the badge belonging to the name.⁴³ It is further evident that the symbols referring to magistrates are sometimes placed in the hands of the Eponymic hero. Thus the flower which is associated on drachms with the name of **ΤΗΡΑΚΛΗΤΟΞ** appears on didrachms with the same signature, sometimes in the field, sometimes in the outstretched hand of Taras.

All the examples referred to of signatures associated

⁴² See p. 173, *seqq.*

⁴³ Period IX., Type B. See Raoul Rochette, *Lettre à M. le duc de Luynes sur les Graveurs Grecques*, p. 45 and Pl. IV. 38.

with a personal symbol belong to the later periods of the Tarentine coinage, and to the time when magistrates' names appear at full length upon the dies. It must not, however, be supposed that all the symbols that appear during this epoch are necessarily to be connected with the names of individual officials. On the contrary we have the clearest evidence that in many cases the symbols refer rather to the city itself. The historic import of some of these has been already noticed, and many no doubt refer to the religious festivals of the Tarentines. We find, for example, the signature $\text{ANO}(\text{P}\Omega\Xi)$ upon three otherwise identical pieces,⁴⁴ coupled with three different symbols—a cornspike, a laurel spray, and a coiling serpent—some or all of which may connect themselves with the Tarentine cult of Dêmêter and Kora, to the importance of which the gold coinage of Tarentum, as well as the recent discoveries of votive deposits, and of the site of a Temple of "the Goddesses," bear sufficient testimony. Connected with this mystic cult was the Tarentine festival of the $\Delta\acute{\alpha}\muεια$ mentioned by Hêsychios.⁴⁵

With regard to the symbols or small objects in the field or exergue of these Tarentine coins, we arrive then at the following general conclusions. On the equestrian types of my first three Periods, as upon the preceding "democratic" issue, and indeed the whole of the earlier coinages of Tarentum, these subsidiary figures must be regarded as an integral part of the type itself. In the case of the horseman they often supply a distinctly Chthonic touch, and indicate the heroic character of the contest in which he is engaged. Seen in conjunction with the figure of Taras

⁴⁴ Period VII. F 3, 4, 5.

⁴⁵ Hêsychios, *Lexicon*, s. v.

on his dolphin, they most frequently must be taken to represent the sea over which he rides in its productive aspects. In the later Periods of the equestrian coinages, on the other hand, the symbols, while still occasionally capable of this simpler interpretation, have for the most part a more transient and individual value. Some, as we have seen, convey distinct historic allusions or have reference to special religious celebrations. Others must certainly be regarded as the personal badges of responsible officials.

As with the symbols, so with the signatures on this didrachm series, a distinction must be drawn in accordance with the time-limits within which they severally fall. In the earliest class of equestrian issues such signatures are either wholly absent or confined to a single letter. In my Second and Third Periods the signatures are still for the most part of single letters, and it is not till after the middle of the fourth century B.C. that monosyllabic signatures become more frequent. Reasons will be adduced in the course of the present inquiry for believing that the whole of this earlier group of abbreviated signatures should be referred to the actual moneyers and engravers of the coins, who seem to have worked in more than one ἀργυροκοπεῖον. In some cases a comparison of several types presenting the same signature affords the clearest evidence that we have to do with the same engraver, not infrequently a true artist, such as, for instance, the engraver who signs "ΚΑΛ;" and it will further be shown that several of the Tarentine engravers worked at the same time for the coinage of other Magna-Græcian cities, notably Hêrakleia and Metapontion. In the case, moreover, of more than one of the early Periods the coins divide themselves into groups repre-

senting the variant artistic traditions of different "botteghe," in each of which several ἀργυροκόποι seem to have worked together. It is only towards the close of the Fourth Century that a new class of signatures, written more or less at full length, makes its appearance in the place of honour on the coin, thrusting these more abbreviated forms into a secondary position. These names present a much greater variety but have no connexion with the style of the coin itself, and there is every reason to refer them in each case to the eponymic Magistrate, or Ephor, who gave his name to the year. Hence it appears that during the later periods of Tarentine coinage that immediately precede and follow the date of Pyrrhus' expedition signatures upon the coins are of a more complicated character and include the names both of magistrates and moneyers; the first in a fuller, the second in a more abbreviated form.

PERIOD I.—TRANSITIONAL.

B.C. c. 450.—c. 430.

It is commonly assumed that the Tarentine didrachms presenting the equestrian figure are later in date than the types which bear upon the obverse the seated Dêmos of the city. This, however, is only partially true. That the "horsemen" as a class belong to a later date than the "democratic" series there can be no doubt. It seems equally certain that some of the coins presenting the seated Dêmos are earlier than any of those bearing the equestrian figure; but, on the other hand, there are to

be found amongst these equestrian types more than one coin which, whether we judge of it by the standard of style or of epigraphy must be regarded as very little posterior in date to the earliest of the issues exhibiting the seated figure, and as certainly anterior to many of the later coins of that class.

Upon the coins which I have included in the present class the attitude in which Taras appears is little more than a reproduction of the earliest scheme, as it is already seen upon the rare incuse pieces struck by Tarentum as a party to the monetary convention of the Achæan cities and adhered to on the succeeding coinages, presenting on the other side a wheel or hippocamp. On the early equestrian types before us Taras is still seen in a stiff archaic pose, resting his right hand on the dolphin's back and extending his left with open palm, here seen sideways,⁴⁶ as on the coins with the wheel and early types with the hippocamp. We find, moreover, the whole design surrounded by a double circle, enclosing a ring of beads or pellets, the immediate descendant of the cable or guilloche border which marks the earliest incuse coinage of Tarentum. This archaic feature is also frequently associated with the wheel and hippocamp classes, but it is only found on some of the earlier types presenting the seated Dêmos. The naive and original rendering of the sea-waves, over which Taras is riding on his marine steed, as seen on the remarkable equestrian piece (Type A, I., Pl. II. 1) is also suggestive of primitive art. The sea is here not merely indicated by a single curling curve or circle, but overspreads the whole lower field of the coin with its tossing billows. Amongst the

⁴⁶ On the incuse type the palm is sometimes seen fronting the spectator—a more clumsy arrangement.

coins with the "democratic" type the only specimen, so far as I am aware, upon which waves are depicted⁴⁷ exhibits the later and less elaborate convention.

The horseman on the obverse of Types A, I. and B is as stiff and inelegant as Taras on the other side, and the steeds themselves betray an even greater degree of rudeness; they have unduly elongated bodies, diminutive heads, and stumpy legs. Compare for a moment these uncouth figures of horse and rider with the perfect mastery of form and luxuriant grace displayed in the treatment of the seated figure on the later didrachms with which that type is associated. Again, the simple archaic scheme of Taras on the equestrian types before us, holding out his open palm as on the earliest of the Tarentine issues, is very different from the more varied design of the same eponymic hero on some of the later "democratic" types, where he appears holding in his hands a shield and lances, a trident, or a wreath, at times with a crested helmet on his head, and, in one or two instances, seated sideways, as if in the act of vaulting off his marine charger. Unless we are to believe that many of the coins of this latter class belong to a considerably later date than these early "horsemen" we may as well cast to the winds every canon of artistic criticism.

The epigraphic evidence supplied by Type B, presenting the remarkable legend **TAPANTINΩN HMI**, fully corroborates that derived from the style and design of these coins. The forms of the angular or sub-angular **Π** and of the **N** are distinctly earlier than those on many of the types representing the *Dêmos*, while the character of the legend

⁴⁷ Carelli (*N. I. V. Tav. cvii. 75*) gives an imperfect representation of this coin without the waves, which, however, are visible on a specimen in my own collection.

itself also indicates an early date. The **HMI** of the legend has been no doubt rightly explained by Von Sallet⁴⁸ as equivalent to **EIMI**, so that the present is a "speaking coin" akin to the well-known stater reading *φαενορ ἐμὶ σῆμα*, for *φαενορ εἰμὶ σῆμα*, or the bronze weight of Gela, inscribed **TON CEΛOION EMI**, for *τῶν Γελοιῶν εἰμί*. **Ἡμί** is, in fact, the strong Doric form for *εἰμί*, and its use in Lacedæmonian Tarentum is thus easily explicable. The appearance of such a dialectic form, as well as the archaic associations of such a legend, must be taken as additional evidence of an early date.

Type A 2, in spite of the better workmanship of the horse, presents on the reverse the same archaic scheme of Taras on his dolphin surrounded by the double-beaded border, and has, therefore, also been included in the present group.

It can hardly be doubted that the first issue of the coins representing the seated *Dêmos*, or the Eponymic Hero as the impersonation of the Tarentine People, is to be brought into relation with the institution of a democratic form of government at Tarentum, which according to Aristotle took place in the year 473. The appearance of a similar type on the Rhêgian dies is in the same way con-

⁴⁸ *Zeitschrift für Numismatik*, I. 278, *seqq.*, as against Friedländer (*Wiener Numismatische Zeitschrift*, 1880), who tried to show that **HMI**=*ἡμι* . . . and betokened the half of a larger monetary unit. But, on the one hand, there is no Tarentine silver unit higher than the didrachm; and on the other, the aspirate form **ἡ** is never wanting on Tarentine coins to the very latest period of issue. On some Tarentine terra-cotta roundels of comparatively late date, the legend **ἡΗΜΙΩΔΕΙΟΝ** appears = **ἡΗΜΙΩΒΟΛΙΟΝ**—another Tarentine Doricism (cf. Prof. P. Gardner, *Hellenic Journal*, iv. 156)—proving that at least a century after the issue of the present coin, *ἡμι* . . . at Tarentum was written with its aspirate.

nected with the revolution by which the citizens of that city recovered their freedom in 466. These Rhêgian coins stand in such close relation to the Tarentine that they supply us with a chronological stand-point for approximately dating some of the democratic types of Tarentum. Upon the earliest Rhêgian pieces of this class, as upon their contemporary Tarentine counterparts [Pl. I. 8], the seated figure is seen surrounded by the olive-wreath, and from the parallel appearance of this significant symbol of Victory as much as from the adoption at Rhêgion of the Tarentine type imaging forth the sovereignty of the People, we may gather that the triumph of the Rhêgian Dêmos was facilitated by the active sympathy of the Tarentines. These Tarentine coins in which the seated figure is seen surrounded by the wreath so closely agree in style with the early Rhêgian coins of the same "democratic" type, that we may confidently assume that they were first issued at the same date, 466 B.C. They form, therefore, a valuable numismatic landmark for fixing a chronological limit to a still earlier class of the same "democratic" type struck at Tarentum, but to which no analogies can be found on the Rhêgian series. This class of coins (Pl. I. 7), in which Dêmos appears under a more archaic aspect, and at times surrounded by the chain or guilloche border in its most primitive form, must have been struck between 474 B.C., the date of the first introduction of this "democratic" type at Tarentum, and 466, when the later class exhibiting the olive-wreath was issued simultaneously at that city and at Rhêgion.

It is, however, with this wreathed series struck from 466 onwards that the early equestrian types before us present the greatest analogy. In both cases, although the guilloche proper, as seen on some of the "democratic"

coins of the earliest class, no longer occurs, we find its nearest degeneration, the beaded ring, enclosed between two circles,—a transitional form, which on the later classes of Tarentine coins gives way to a plain ring or to a beaded ring without border. The occasional appearance \leq for \leq on the wreathed “democratic” class implies indeed a certain anteriority, but taking into consideration the generally archaic character of this small group of “horsemen,” it would not be safe to bring down their date of issue many years after the first emission of the others. The “wreathed” type itself was at Tarentum of very transient duration, and from its comparative rarity it is probable that its issue was confined to the years immediately succeeding 466. It follows that we shall not be far wrong in assigning to these early equestrian types, which are at least so closely allied to the other that they present the same transitional form of border, the approximate date of 450 B.C.⁴⁹ Type A 2, however, as already observed, though presenting certain common characteristics, shows a marked advance in the representation of the horse, and must be referred to a distinctly later date than the others.

I. Type A.

Naked horseman, his right hand resting on the horse's back, holding whip, on galloping horse with elongated body and stumpy legs.

⁴⁹ I observe that the conclusions that I had independently arrived at regarding the date of the earliest equestrian coins, are generally corroborated by Sambon, in his *Recherches sur les anciennes Monnaies de l'Italie méridionale*, p. 123. He also places the earliest issues of the horseman type not long after the issue of the earlier coins with the seated figure.

Obv. .

1. Horse to r.

Car.⁵⁰ cix. 100.

Garrucci, T. xeviii. 4.

B. M. Cat. 109.[Pl. II. 1. (Bodleian
Collection, Oxford).]

Rev.

TAPA . . . Taras astride on dolphin to r., his r. hand resting on dolphin's back, and his left extended with open palm, seen sideways. Beneath, the sea indicated by a curling mass of waves occupying the whole lower field of the coin. In f. to r., **T**. Beaded double circle.

2. Horse to l.

Car. cix. 100.

[Pl. II. 3 (C. W.
Oman).]

TAϷANTIΩΩN. (retrogr.) Taras astride, &c., as No. 1. Scallop shell in place of waves. Beaded double circle.

I. Type B.

Horseman galloping r., as Type A, but with a conical cap on his head.

1. Beneath horse,

Ⓞ. Cab. des Médailles.

Sambon, *Monn. de
la presq. Ital.*, Pl.
XIV. 10.

[Pl. II. 2. A. J. E.]

TAϷANTIΩNHMI. Taras astride, &c., to r., resting his r. on dolphin's back and extending his l. with open palm (as before, A 1 and 2). In f. to l., **Π**. Beaded double circle.

I. Type C.

Naked ephēbos on horse walking r.

1. Type described.

[Pl. XI. 1. Sant-
angelo Coll.]

ΩΩNITNAϷAT. Taras astride, &c., to r., as before, beneath dolphin, scallop.

PERIOD II.

B.C. c. 420—c. 380.

The comparative rarity of the equestrian types comprised in our First Period affords sufficient indication that their

⁵⁰ The references are to Carelli, *Numorum Italiae Veteris Tabulae*, ccii. (Cavedoni's edition, Leipzig, 1850). Other references are given in the case of rarer varieties, and of types not known to Carelli. Coins in my own cabinet are referred to as "A. J. E."

issue was of short duration. Between these early "horsemen" and the present group there is an obvious "fault" in artistic development, and it is evident that a considerable interval of years separates the two classes, though A 2 of the preceding Period, and A, B, and D 1 of the present, serve partly to bridge over the gap. Whether or not in the first appearance of the equestrian type about the middle of the fifth century B.C., we are to trace the influence of an aristocratic reaction at Tarentum, it is certain that the Tarentine moneyers were not long in reverting to the preceding "democratic" type. It was not indeed till after the revived issues of this class had been again current for some length of time that a fresh revolution took place on the Tarentine dies, the equestrian type now permanently displacing the seated Dêmos.

The "horsemen" of this Second Period with which we have now to deal, still as a rule retain the broad-spread appearance and slightly larger module characteristic of the preceding "democratic" class. The inscription is still occasionally retrograde, in one case taking the form **3ONITNAPAT**, and the design is often surrounded by a plain or beaded ring, but the beaded double circle characteristic of Period I. is no longer found. The horseman appears on a stationary as well as a cantering horse, and is sometimes seen at full gallop. It is now, moreover, for the first time that we meet with the remarkable scheme of the rider with his knee bent under him as if in the act of vaulting from his steed. The figure of Taras on his dolphin is still occasionally seen in the archaic attitude resting one hand on the fish's back and with the other extending an open palm: novel versions of the youthful hero, however, now begin to appear. At times he is seen gracefully pointing downwards with his out-



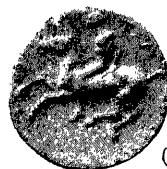
1



2



3



4
(Per. II.)



Equestrian Types Period I. c.450-c.430 B.C.



5



6



7



8



9



11



10



Equestrian Types Period II. c.420-c.380 B.C.

stretched hand as at some sea creature before him, at which with his other arm he aims a short javelin. The most exquisite version of this scheme is that [Type L 2, Pl. II. 11] associated on its obverse side with the signature **ΞΛ** in minute letters, which, as I hope to show, there is every reason to identify with the first letters of an artist's name.⁵¹ At times Taras is seen with lance, shield, and helmet, or some other attribute such as an oar or *akros-tolion* in his hands, and these latter types—especially that in which he holds on his left arm a lance and large oval shield and extends a crested helmet in his right—show a close affinity to some of the later coins of the previous class, exhibiting on the obverse the seated *Dêmos*.⁵² Another point of resemblance with the "democratic" series is to be found in the scallop shell which is often introduced below the dolphin to symbolize the sea.

Although as a rule the types of this period are broad-spread and of large module, traces appear already in Types E 4, H, and K of a more compact style of engraving, which becomes a characteristic feature of a whole series of issues belonging to the succeeding Period III., for the most part associated with the signature **Λ**, which together with **ΞΛ** occurs on coins of a similar style of engraving belonging to the close of the present class.

The remarkable type that I have placed at the head of the coins of Period II. [A 1; Pl. II. 5], representing a youthful horseman clad in a loose flowing tunic and wearing a peaked cap, whom I have ventured above to identify with the Tarentine *Ækist Phalanthos*, throws a valuable light

⁵¹ See p. 48. The specimen from which the figure [Pl. II. 11] is taken is unfortunately not very well preserved.

⁵² Cf. Car. cvi. 63. Garrucci, xcvi. 32.

on the approximate date of this second period of equestrian issues. This coin, from the broad character of the design as well as the delicate execution of the drapery, has greater affinity to the finest of the types representing the seated Dêmos than any other example of the "horseman" class. Both the horse and rider bear a certain resemblance to two Macedonian types, one of Archelaos I. (B.C. 413—399), and the other of Amyntas III.⁵³ after his restoration in 381, both of which display a mounted spearman in a flowing tunic or chlamys, and wearing the flat Macedonian *petasós* or *kausia*. A still nearer parallel is, however, supplied by the didrachms exhibiting a similarly attired horseman, though without the cap, struck by the Odrysian king, Seuthes I., in 424 B.C., and bearing on the reverse the well-known legend Σ EYΘA KOMMA.⁵⁴

The horse on the Tarentine piece is somewhat less free in its pose and modelling than those on the Macedonian coins referred to. On the other hand, it displays the closest agreement with that on the Thracian example. Unless, therefore, we are to assume that Thracian and Macedonian art was at this time ahead of the Tarentine, which is in the highest degree improbable, we cannot be far wrong in assigning to the present coin the approximate date of 420 B.C.

One of the latest types of the didrachm class with which we are dealing—and one, moreover, that in some of its varieties supplies a link of transition to the coins of the succeeding Period III.—is that in which a caduceus is seen in front of a stationary horse. These coins have a special value as supplying additional evidence as to the

⁵³ Both coins are reproduced in Gardner, *Types of Greek Coins*, Pl. VII. 4 and 5.

⁵⁴ *B. M. Cat. Thrace*, p. 201.

approximate chronological limits of the present class. In the great hoard of Magna-Græcian coins discovered at Pæstum in 1858, there occurred, besides some earlier Tarentine coins representing the hippocamp and the seated Dêmos, a fair number of pieces belonging to the equestrian class; amongst which, however, only one—namely, of the type of the present Period exhibiting a caduceus in front of the horse—bore a signature of two letters, AA.⁵⁵

The absence of any other Tarentine coins presenting more than a single letter in the field is a sure indication that the horsemen discovered in this hoard belonged to the present Period. On the coins of the succeeding Period III., signatures of two and even three letters are not infrequent; but this type exhibiting the caduceus is, with a single exception, the only coin of the present class on which a signature is to be found of more than a single letter. This caducean type, moreover, belongs—at least in one of its varieties—to the end of the period with which we are dealing. It occurs in a broad-spread form which is quite consistent with the prevalent character of the earlier equestrian types of this group, but also in a smaller module, which connects it with the issues of the succeeding Period III.

There seems good reason to regard this coin as the latest of the Tarentine issues represented in the Pæstum hoard; and it follows that if it is possible to determine the date when that hoard was deposited, we shall at the

⁵⁵ For a summary description of this find see Sambon, *Recherches sur les anciennes Monnaies de l'Italie Méridionale* (Naples, 1863, p. 9). The type is given in Sambon's list of Tarentine Coins, p. 114, No. 47. A similar type is engraved by Carelli, T. cix. 109 and 111, in two modules. In the one case, however, no signature appears; in the other, only A.

same time obtain a clue to the approximate time-limits of the present class of Tarentine didrachms.

In the Pæstum hoard there were found a great quantity of Poseidonian didrachms or diobols, described as "fleur de coin," and belonging to the last issue of that city. The exact date of the capture of Poseidonia by the Lucanians has unfortunately not been preserved; and although the fall of this great Hellenic city must be regarded as one of the landmarks of Greek and Italian history, such is the piecemeal character of ancient annals that it is only by a deductive process that we can arrive at the approximate date of this far-reaching event. From the account preserved by the Tarentine Aristoxenos, a pupil of Aristotle, of the mourning feast in which the Greek inhabitants of what had now become Pæstum revived the memory of the free Hellenic days of Poseidonia, we gather that at the time in which he flourished—from about 336 B.C.⁵⁶ onwards—the independence of Poseidonia was already a distant tradition. On the other hand, as early as 390 we find the Lucanians already in possession of Laos, the sister colony of Sybaris, and inflicting under its walls a crushing defeat on the Thurians. As Poseidonia lay nearer the original Lucanian base than Laos, and there is no mention of the Poseidonians in Diodôros' account, we must infer that it, too, was in Lucanian hands at this date; and it was in all probability the fall of these two cities that stirred the Italiote Greeks to form a defensive league against the barbarian invader in 392.⁵⁷ Assuming, as we have every reason to do, that the occasion of the deposit of the Pæstum

⁵⁶ Ol. cxi. Suidas, s.v. 'Αριστόξενος.

⁵⁷ Diodôros, xiv. 101. Cf. Grote, c. lxxxiii. (vol. vii. p. 466, ed. Murray, 1862).

hoard is to be found in the Lucanian capture of the city, it follows that the Tarentine coins of the present class, which must be ranked among the most recent contents of the find, were issued during the years immediately preceding 392 B.C.

This conclusion receives corroboration from a small lot of didrachms, evidently part of a hoard, which recently came under my notice at Naples. These consisted of about a dozen coins of Terina,⁵⁸ presenting several of the types struck during the period which was cut short by the capture of that city by Dionysios of Syracuse in 388; some coins of Thurii, including two with the signature $\text{Mo}\Lambda\omicron\zeta\zeta\omicron\zeta$; one of Krotôn, with the facing head of Hêra Lakinia and Hêraklês seated on the lion's skin extending a wine cup, the coinage of which, in all probability, immediately preceded the issue of the alliance pieces struck in 390, representing the infant Hêraklês strangling the two serpents.⁵⁹ Besides these, there were a few late Kauloniate types, some of which may have been struck shortly before the destruction of the city by Dionysios in 388; a Tarentine coin of the "democratic" type, but one of the latest of its class; and two other Tarentine coins, both of them characteristic specimens of the equestrian group with which we are now dealing. One of these, Type D, 1 [Pl. II. 8] of the present Period, shows on the obverse a horseman cantering, and holding a round shield behind him; while Taras, on the reverse, rides over the sea-waves, holding an oar on his left arm: the other is the type already described, in which the horseman stands before a caduceus; in this case it is signed Λ .

⁵⁸ Car. clxxvii. 15; clxxviii. 25, 28. *B. M. Cat.* 22; and some others.

⁵⁹ See Head, *Historia Numorum*, p. 82.

Everything points to the year 388 as the approximate date of the deposit to which the above coins belonged, and we have here a new indication of the date of the present class of Tarentine coins.

Whether or not some of the later issues of the "democratic" class may have alternated with the earlier issues of this second class of equestrian types it is difficult to determine. One or two of the figures of the seated *Dêmos*,⁶⁰ certainly convey an impression of less primitive design than the warrior in *pilos* and *chiton* placed first among the horsemen of this period. If it was so, the issues of the present class may extend over a somewhat larger space of years than from their numerical representation alone we should be inclined to attribute to them. From the development in style perceptible in some of the later examples it is evident that the mintage of these coins should not be restricted within too narrow chronological limits, and with the evidence of the finds before us we shall not greatly err in assigning to the present numismatic period the approximate dates 420—380 B.C.

II. Type A.

Youthful horseman in flowing tunic and *pilos*, or conical *petasos*, cantering, r., and thrusting downwards with his lance.

Obv.

Rev.

No letter.
B. M. Cat. App. I.
Car. cix. 115.
[Pl. II. 5.]

Taras astride, &c., to l., his r. arm raised and his l. resting on dolphin's back. Beneath dolphin, scallop and curling crests of waves in a single curve. In f. to r. **QAT**.

⁶⁰ As, for instance, the type, an example of which is engraved by Carelli, cvii. 73.

II. Type B.

Horseman galloping l., on horse of better proportions than Period I. B.

Объ.

In f. $\geq A \text{ } \mathfrak{q} \text{ } AT.$
[Pl. II, 4. Imhoof-
Blumer Coll.]

Rev.

Taras astride, &c., to r., as before, extending his l. hand; in f. to r. ¶. Beneath dolphin, a cuttle-fish.

II. Type C.

Naked horseman to l. (sometimes helmeted), his knee bent under him as if vaulting from his cantering horse; his r. holds horse's bridle, and in his l. he holds a round shield, sometimes also a lance behind him.

1. Rider wears crested helmet, and holds lance as well as shield. In f. in front of horse \approx .

B. M. Cat. 263.

[Pl. II. 6.]

Taras astride, &c., to l., holding behind him a large oval shield and spear, and extending in his r. a crested helmet. Beneath, TAPAΞ.

2. Rider bare-headed. \leq below horse. No lance; on shield star of six rays. Plain ring border.

B. M. Cat. 265.

[Pl. II. 7.]

Same, but in f., in front of Taras, ≈

II. Type D.

Naked horseman cantering l., holding small round shield behind him.

1. No letter.
[Pl. II. 8. A. J. E.]

Taras astride, &c., to l., holding oar on l. arm, and with r. pointing downwards. Beneath dolphin, curling crests of waves. In f. to l. **ΣΑΡΑΤ**. Plain ring border.

2. Same.
Santangelo Coll.

Same, but Taras to r. Beneath
dolphin

$$TAPAN$$

$$TI\ N\Omega[N].$$

3. Same.
A. J. E.

Taras astride, &c., to r., pointing downwards with l., and with r. aiming a dart downwards. Plain ring border.

II. Type E.

Naked Ephēbos crowning stationary horse to r.

Obv.

Rev.

1. Horse to r.

[Pl. II, 9. Santangelo Coll.]

TAPANTIONΩ. Taras astride, &c., to r.; his r. hand resting on dolphin's back; his left extended, with open palm. Scallop below.

2. Same, but caduceus in front of horse.
Car. cix. 109.

Same, but no scallop. **TAPAΞ** beneath dolphin.

3. Same. In exergue **AA**.

Sambon, *Recherches*, &c. p. 114, No. 47.
Pæstum find.

Same (?).

4. Same as 1 (rather smaller module).

Cf. Car. cix. 111.

Same, but **TAPAΞ** in f. to l. Beneath dolphin, **A**.

5. Same. Beneath horse, **A**. Plain ring border.

A. J. E.

Taras astride, &c., to r., resting his l. hand on the dolphin's head, and with his right aiming a dart downwards. In f. to l. **TAPAΞ**.

6. Horse to l. (lifted off fore-leg).

[Pl. XI. 2. Santangelo Coll.]

Same as 1—4, but Taras extends a distaff.

II. Type F.

Naked Ephēbos, bridle arm only visible, seated r. on stationary horse which lifts its off fore-leg.

1. Type described.
Car. cix. 102.

Taras astride, &c., to r.; his l. hand resting on dolphin's back; his r. extended, with open palm. Beneath, scallop. Insc. round, **TAPANTIN**.

II. Type G.

Naked Ephēbos cantering l., his left hand resting on horse's back behind him.

1. Kantharos beneath horse.

Car. cix. 107.

Taras astride, &c., to r.; his l. hand on dolphin's back; r. extended, open-palmed. Beneath, scallop: insc. round, **ΞONITNAPAT**. In beaded border.

II. Type H.

Naked Ephēbos galloping r., with his r. arm thrown back.

Obv.

Rev.

1. Type described.
 Λ beneath horse.
 Plain ring border.
 Car. cxii. 173.

Taras astride, &c., to l.; his r. arm resting on dolphin's back; his l. extending akrostolion. Beneath, Λ and TAPAΞ. Plain ring border.

2. Same. No letter.

Same. No letter.

A. J. E.

II. Type K.

Naked Ephēbos to l. crowning a stationary horse, and holding in his l. hand behind him a small round shield.

1. Type described.
 Plain ring border.
 Not in Car. B.
 M. Cat. 200.

Taras astride, &c., to r., pointing downwards with l. hand, and with r. aiming a trident. Insc. ΞAPAT. Plain ring border.

[Pl. II. 10.]

II. Type L.

Naked Ephēbos galloping l., holding reins with both hands.

1. Beneath horse,
 Λ. Plain ring border.
 A. J. E.

Taras astride, &c., to l., resting his l. hand on dolphin's back, and with r. extending akrostolion. Beneath dolphin, Λ and TAPAΞ.

2. Same. Beneath horse, ΞΛ, in minute characters. Plain ring border.

[Pl. II. 11. A. J. E.]

Taras astride, &c., to r., pointing downwards with l. hand, and with right aiming downwards with dart. (Cf. Type D 3.) Beneath dolphin, TAPAΞ. Plain ring border.

PERIOD III.—THE AGE OF ARCHYTAS.

B.C. c. 380—345.

The Numismatic Period that now succeeds derives a special interest from the fact that it covers the space of time during which the philosopher-statesman Archytas

was exercising predominant influence in his native city. I have included in the present Period all the issues that extend from the conclusion of the preceding class and the approximate date of 380 B.C. to the time when the renewed struggles between Tarentum and its barbarous neighbours assumed a more serious aspect from the appearance on the scene of the still more redoubtable Lucanians. So far, however, as the coins themselves enable us to judge, the period with which we are at present concerned seems to have been largely endowed with the blessings of peace. The horseman appears but rarely with arms in his hand, as is so frequently the case in the succeeding epoch. One of the commonest schemes of Taras on his dolphin that characterizes the present series shows the Eponymic Hero, who may be taken to personify Tarentum itself, in a state of idyllic repose; and in other instances, where he appears in a more active guise aiming a trident or harpoon at a fish below, his activity connects itself with the peaceful industries of his city. These coins and some of the earliest types of Period IV., the theme of which is still the Tarentine fisheries, may well be regarded as a numismatic evidence of the peace and prosperity which the wise government of Archytas had secured to his fellow citizens.

An evidence of the large-minded political activity of Archytas, and of the nearer relations into which the cities of Great Greece were drawn under his influence, is to be further found in a silver coinage of smaller denomination, which about this time issued from the Tarentine mint. Side by side with the litras of the traditional Tarentine system, there now appear obols of Attic standard to serve the purpose of a federal currency. These coins reproduce on their obverse side the head of Pallas, which since the

date of the foundation of Thurii had been adopted by several Magna-Græcian cities as a tribute to Athenian influence; while on their reverse they display the fine design of Hêraklês strangling the Nemean lion, the special badge of the Tarentine colony of Hêrakleia, now become the meeting-place of the Federal Council of the Italiote Greeks.

It is somewhat difficult to define in any general terms the artistic features of the great variety of didrachm types of which the generation embraced in the present Period was productive. On the whole, however, it may be said that the horses show a juster proportion and a greater freedom of action than had hitherto been achieved, while in the case of the riders there is greater variety in the time of life represented. Mere boys and jockeys often take the place of the full-grown *Ephêboi* of the earlier groups. The reverse designs of Taras on his dolphin belonging to this Period must be classed amongst the highest products of the Tarentine mint, and demand a more detailed consideration. The inscription is simply ΤΑΡΑΞ, never retrograde, and the module of the coin has a tendency to become smaller and more compact.

It is further evident that the coinages of this period may be divided, according to their fabric, into two main classes, both alternating with, and on the whole contemporary with, one another, though showing very distinct schools of artistic tradition. In the first of these we are struck with a peculiarly compact style of representation and a tendency to surround the design with a ring or border. In the other class we have a broader and more massive treatment, and the border is apparently quite unknown. Both of these classes, in fact, represent the perpetuation of a dualism in fabric already perceptible in

Period II. In Type E 4, K and L of that Period we already discover the prototypes of the abnormally compact series of figures that appear during the Period with which we are now concerned.

If we examine the coins of the first class, characterized by the compact character of its engraving,⁶¹ we find that, although not so numerous as the other, they show considerable skill in composition, and we seem to acquire distinct evidence of the reaction of individual masterpieces of sculpture and painting on the die-sinker's art. Of singularly sculpturesque aspect is the horseman [Type C, Pl. III. 5] with the bridle-arm in front of his horse's neck, and his head gracefully inclined towards that of his charger—a masterpiece of skilful pose and harmonious balance, which suggests the influence of some familiar relief in marble. It is as it were a detached figure taken from a frieze, and makes us the more regret that so little of the sculpture of the Tarentine temples has been preserved. Not inferior to this in artistic conception, and, indeed, displaying a marked fellow-feeling with it, is the reverse of the same piece, representing Taras, his head bowed forward as before, seated sideways on his marine charger, one arm resting on the dolphin's tail, the other lightly laid upon its forehead, his whole attitude instinct with reverie and repose.

This remarkable coin is signed Λ , assuredly indicating the same artist who signs $\Xi\Lambda$ and Λ during the preceding Period, and the same signature is found on several coins of the present group. The coins with these signatures rank among the best examples of the compact style of engraving described above, and from the correspondence

⁶¹ Types A—G inclusive.



Equestrian Types Period III. c.380-345 B.C.

alike of signature and of artistic tradition we are justified in concluding that the peculiarities of this class are largely due to the influence of a single engraver. The reverse of the coin signed $\Sigma\Lambda$ in minute letters, which I have placed last (Type L, 2) in the series belonging to Period II., is, from an artistic point of view, extremely remarkable. Though the horse on the obverse is still somewhat immature, the exquisite figure of Taras pointing downwards at the sea creature, whatever it may be, at which with his other arm he aims a dart, will not easily find a parallel for playful grace and lightness of touch. In feeling, however, it is curiously in harmony with the beautiful coin signed Λ of the present class, while the obverse designs of other coins with the same signature present an equally close agreement in their type of the galloping horseman. Style, signature, and design alike lead us to refer these works to the same artist whose initial *Le*. . . . may find its completion in such well-established Tarentine names as *León* or *Leónidas*.

It is a noteworthy fact that the scheme described above, of Taras seated sideways on the dolphin, resting with one hand on its back, which now first appears and becomes frequent on the Tarentine dies, is almost exclusively confined to the coins of this Period presenting the peculiar compact style of engraving. This differentiation alike of type and style amongst otherwise contemporary issues is a strong indication of the fact suggested by many other phenomena to which I shall have occasion to allude, that there was more than one *atelier* of Tarentine moneyers, and that these different workshops had their peculiar traditions of engraving. Only in this way, moreover, is it possible to account for the distinct dualism in fabric which runs through the coinages of Periods II., III., and IV.

In the scheme above referred to Taras usually appears in perfect repose, and with both hands resting on the dolphin. At times, however, he is seen extending a symbol in his right hand. But there also occurs a more active version of the design, in which Taras, sometimes represented as a youth, sometimes as a bearded man, is seen turning round to aim a trident at a tunny or a cuttle-fish below. Taken together, these latter types present us with the most speaking allusions to a principal branch of the Tarentine industry—the cuttle-fish, like the scallop or the purple-shell, which elsewhere appears in the field, pointing rather to the fisheries of the little inner sea, the present *Mare piccolo*; the tunny, on the other hand, to the open Ionian waters.⁶²

These fisher types, again, have for us a special interest as supplying some of the best authenticated examples of engravers' signatures to be found on the Tarentine dies. The remarkable piece (Type F, 3), a reproduction of which, from an unique example in the Santangelo Collection at Naples, is given for the first time on Pl. XI. (Fig. 4), exhibits on the reverse, beneath the design of the youthful Taras spearing a cuttle-fish, and again beneath the horse-man on the obverse, the signature $\Xi\Omega K$ ⁶³ engraved

⁶² The best commentary on the Tarentine fisheries, ancient and modern, is to be found in Joannes Juvenis, *De Antiquitate et varia Tarentinorum Fortuna* (Naples, 1589). See cap. ii. *De Tarentinorum Piscatu*. The cuttle-fish, not to speak of the value of its dye, is still a favourite article of food amongst the seafaring population of the Mediterranean, and notably of the modern Tarentines, who catch it especially in March and December.

⁶³ This is in all probability the same engraver whose signature appears as $\Xi\Omega$ on a small tessera on a diobol described by Raoul Rochette (*Lettre à M. le duc de Luynes sur les graveurs des Monnaies Grecques*, p. 45, Pl. III., 39), who justly regarded it as an example of an artist's signature. Raoul Rochette being unacquainted with the didrachm described above, sought erro-

on an oblong tablet, which recalls an artistic device adopted by the great Syracusan engravers for disposing of their names on the field of a coin.

In Type G we find the same design in a somewhat variant form, associated with the interesting obverse design already referred to⁶⁴ of the youthful *ἄμφιππος* leading a second horse, which affords at the same time a good example of the compact style of engraving characteristic of the group under discussion. In this case a notable and highly suggestive development occurs in the scheme of the reverse, Taras no longer aiming his trident at the fish with his nearer arm, but bringing round his further arm for the purpose in such a way as to bring the muscles of his breast into strong relief.

On a somewhat later group, again, Type F, 1, of the succeeding Period (IV.), which must be regarded as the sequel of Types F and G of the present class, we find a scheme (Pl. XI. 6) which combines certain features of both its predecessors. In this later development we see this fisherman type brought into connexion with the highly ornate and elaborate design in which the prancing steed is embraced by a boyish figure. There can, however, be little doubt that both designs were engraved by artists of the same school.

From a comparison of the two closely related varieties (Type G, 1 and 3, Pl. III. 7 and 8), it results that the letter

neously to identify the signature with that of the engraver who, on a late didrachm of the reduced standard (Pl. X.; 2), signs $\Xi\Omega$ in minute letters between the horns of a bucranium, and also with the Pyrrhic Magistrate $\Xi\Omega\Xi\text{TPATO}\Xi$. The unique diobol above mentioned must be regarded as probably the earliest of those presenting the type of Taras on his dolphin, and which mostly belong to the period after 300 B.C. See p. 10.

⁶⁴ See p. 21.

A which in the one case appears in the field must with great probability be taken as the engraver's signature. These two varieties in my own collection have their obverse types struck from the same die; the reverse, however, presents us with a significant alteration. In the one case a small raised tablet appears in the field, such as it is natural, as in the instance above given, to associate with an artist's signature, though no letter can at present be deciphered on it. On the fellow coin this tablet is no longer found, but its exact position in the field is taken by the letter **A**. On type **A**, 1, of Period IV., on the other hand, there is no tablet or signature on the reverse, but beneath the figure of the horseman, which may well be from the same hand, appears the signature **AP**.

But this leads us a step farther. On the present group the initial **A** is associated with the obverse signatures **K** and **ΦΙ** in conjunction, while in the first instance presenting the tablet in the field, a **Χ** appears beneath the dolphin. But, as will be shown in considering the coinage of the succeeding Period IV., this conjunction of signatures answers under an abbreviated form to the conjunction of **KAA**, **ΦΙ** and **API** on a group of coins which presents the clearest example of artistic collaboration on the Tarentine dies.⁶⁴ The form **AP** already supplies an intermediate link with the fuller form **API**, while the signature **K**, which is also in a special way associated with this exquisite design, undoubtedly belongs to the same engraver, who at a slightly later date attaches his signature to some of the noblest of the Tarentine types, indifferently with the initial **K** and the fuller form **KAA**.

But no one acquainted with the finest types of the Tarentine colony of Hêrakleia can fail to be struck with the evident parallel supplied to the scheme of the hero

⁶⁴ P. IV. H.

with his head and upper part of his body turned back and his right arm brought round in athletic action, by the noble design of Hêrâklês strangling the Nemean lion, as it appears on some of the finest didrachms of that city. It is something more than a mere reminiscence. The representation of the slightly bowed head, the treatment of the hair, the very play of the muscles, though intensified in the Hêrâkleian example, present such remarkable points of similarity as must themselves suggest identity of handiwork. A suggestion, derived from a very different design, has been here taken over and applied, with great felicity, to a subject with which it had a less obvious relation.

There can be little doubt that the introduction of this noble design of Hêrâklês and the lion at the Tarêntine colony was due to the artist whose signature appears as Φ on contemporary coins of Hêrâkleia, Thurioi, Terina, and Neapolis, and who, as Mr. Poole has shown,⁶⁵ represents the grafting of Athenian art traditions on Italian soil. It may well be that in the case of this noble scheme, which appears about the same time on coins of Mallos in Cilicia (after c. 385 B.C.)⁶⁶ and of the Cyprian king Dêmonikos⁶⁷ at Kition (c. 374—368 B.C.) we must recognise the influence of a well-known work of statuary analogous to that exercised by the figure on the balustrade of the Temple of Nikê Apteros on the Terinæan engraver, or to the memory sketch of the Theseus of the Parthenon pediment on the coins of Hêrâkleia, Krotôn, and Pandosia. On the Mallian coins the hero is represented standing on a

⁶⁵ *Num. Chron.*, 1883, p. 269, *seqq.*

⁶⁶ Imhoof-Blumer, *Annuaire de Numismatique*, vii. p. 109.

⁶⁷ J. P. Six, *Num. Chron.*, 1882, p. 91. For the evolution of this design from the earlier archaic scheme of Hêrâklês thrusting a sword into the lion's breast, see Furtwängler, *Coll. Sabouroff*, II., Pl. CXLVIII.

distinct basis, a clear intimation that the design is taken from a statue, and M. Six⁶⁸ has suggested with great plausibility that the original should be traced to a bronze group of Myrôn.



Fig. 1.

In the Period with which we are now dealing, the work of the artist Φ at Hêrakleia was taken up by two new engravers, one of whom signs **KAA** in the field (Fig. 1), while the name of the other appears either as **APISTOEE** in minute letters on the exergual line, or on the crest of the helmet on the obverse⁶⁹ in the completed form **APIΞTOΞENOΞ**, or again is represented on one or both sides by the simple initial **A**. That both of these engravers enjoyed a reputation in their day is evident from the re-appearance of the same signatures on contemporary coins of Metapontion,⁷⁰ and we have good warrant for believing that both of them worked also for the Tarentine dies.

The Hêrakleian type of the standing Hêraklês, with which they are associated, and the influence of which is felt on the scheme of Taras turning round on his dolphin as it appears on Pl. III. 7-8, was in fact at this very time itself adopted, as already noticed, by the Tarentines for their new coinage of federal diobols. Upon some of the finest of these, moreover, we not only find the initials

⁶⁸ *Zeitschr. f. Numismatik*, xiv. p. 142, *seqq.*

⁶⁹ Imhoof-Blumer, *Berliner Blätter*, v. 33 (T. LIII. 2).

⁷⁰ Raoul Rochette, *Graveurs des Monnaies Grecques*, Pl. IV., 32-36; Garrucci, *op. cit.* ciii. 13-15.

K, Φ, and others of signatures that appear on the contemporary Hêrakteian didrachms which served as their models, but even at times the same symbols, such as a scallop shell, or an owl between the legs of Hêraklês, as it is seen on the noble Hêrakteian piece engraved above (Fig. 1), signed KAA. When, then, on the Tarentine didrachms which so evidently betray the work of hands familiar with the Hêrakteian design, we find the signatures K and A answering to the KAA and API of somewhat later Tarentine types of the same school, we can hardly avoid the conclusion that we have here to do with the same artists, Kal and Aristoxenos, who sign upon the Hêrakteian coins. That the signatures indeed on the Tarentine coins should incline to a more abbreviated form is only what we are led to expect from other analogies. As will be shown later on,⁷¹ the conditions under which engravers signed at Tarentum were different from those of the neighbouring cities. It must, however, be observed that, in the case of the Hêrakteian coins referred to, Aristoxenos combines two systems of signature, signing in minute letters—*en artiste*—on the exergual line of the helmet, but at the same time placing a large A in the field of the obverse as a more official badge,⁷² while in other cases he signs simply with his initial letter on either side.⁷³

The coins of the second class⁷⁴ referred to as belonging to this Period, and the issue of which seems to run parallel with the other, present, as already noticed, a broader and less compact treatment of the design, and, for the same reason, display on the whole a fuller rendering of the horses. Nothing grander of its kind was produced by the

⁷¹ See p. 119, *seqq.*

⁷² See p. 119.

⁷³ See *Das Königliche Münzkabinet* (Berlin), Pl. VIII., 723.

⁷⁴ Types H—T inclusive.

Tarentine engravers than the massive horse of Type H [Pl. III. 10], standing in front of a bearded Herm. In Type K again [Pl. III. 11, 12, 15] we have another noble steed, which gains in majesty from the contrast with the child rider reaching forward over its huge neck, his long waving tresses streaming to the breeze.

Of the equestrian types of this class of coin that of the horseman vaulting from his horse is the most frequent. On the reverse, in place of the sideways figure which is such a regular concomitant of the parallel group, Taras is almost invariably represented resting his left arm on the dolphin's tail, so as to preserve his balance, while he throws forward his further leg, so that the outline of its foot and shin is seen in front of the fish's head. The persistence of this scheme throughout this group of coins is of importance in its typological relation to the characteristic pose assumed by Taras in a group of coins belonging to the succeeding Periods, where his leg appears thrown still further forward, and at times is visible in its entirety.⁷⁵ Both on the obverse and reverse of coins of this group the ring or border now entirely disappears. Taras himself, though sometimes represented with elegance and grace, appears for the most part either as a full-grown ephêbos or as a child of decidedly heavy build. Here again we trace the antecedent stages of a style prevalent in the succeeding epoch.

The natural treatment of the hair is one of the *argutie minutiarum*, which on this class of coins, and towards the close of this Period, attained its greatest perfection on the Tarentine dies. Taras on his dolphin or the boy rider bending over his horse's neck are not infrequently depicted with long waving tresses streaming in the wind,

⁷⁵ An exceptional instance of this scheme is seen in Type A 3 [Pl. III. 3] of the present Period.

displaying even greater freedom and picturesqueness than the somewhat similar style of hair seen on one of the warriors of the frieze from the Akropolis temple of Tarentum.⁷⁶ In the case of the horses' manes we find, moreover, a growing elaboration of detail, which in the group with which we are dealing, especially in its latest examples, takes a peculiar form. On these the manes are seen curling up in a regular series of well-defined and wave-like crests—a refinement of which the great Syracusan engravers (who would eagerly have seized on such a detail) were as yet ignorant, and which strongly contrasts with the straight-cropped and more Pheidias manes of the earlier coins of Tarentum itself. This curled arrangement is found occasionally on sculpture, as, for instance, on a relief at Delphi representing a quadriga; but it seems more appropriate to metal-work, and formed, no doubt, a feature of some of the bronze horses of Tarentine *anathēmata*. This peculiarity in its most exaggerated form may be said to be characteristic of the Tarentine coins of the close of the present Period and of that which immediately succeeds, during which it is at times even more elaborate. It still accompanies the finer horseman types of Period V., but before the time of Pyrrhus it entirely vanishes from the Tarentine dies.

In Types A—G, inclusive, I have grouped together the coins of this Period exhibiting the more compact style of relief.

III. Type A.⁷⁷

Naked youth crowning his stationary horse to r., in plain ring border.

⁷⁶ *Notizie dei Scavi*, 1881, t. viii. 1.

⁷⁷ In this and the succeeding Periods the inscription recording the civic name is generally omitted, and, except in the case of the special variations given, **TAPA** is to be understood.

Obv.	Rev.
1. Type described. Horse to r. Car. cix. 106.	Taras seated sideways on dolphin, resting r. hand on fish's head, and l. on tail. Beneath sometimes Λ .
2. Same. Beneath horse, Λ . Imhoof-Blumer Coll. [Pl. III. 1.]	Same; but on body of dolphin, H . Beneath, P .
3. Same. Beneath horse, Λ . Car. cxii. 172. <i>B</i> . <i>M. Cat.</i> 128. [Pl. III. 2.]	Same; but Taras astride holding akrostolion. Beneath, Λ .
4. Same. B. M. [Pl. III. 3.]	Same, but Taras holds kantharos, and throws l. leg in front of the dol- phin's snout.

III. Type B.

Naked youth galloping to right. The horse of better proportions than Type L. of Period II., from which it can be easily distinguished by the fact that in the present case the horse is invariably to the right, in the other, as invariably to the left.

1. Beneath horse, Λ . Garr. Tav. cxviii. Ι for Λ .	Taras astride, &c., holding out akro- stolion.
2. Same; but no letter. Car. cix. 113. [Pl. III. 4. A. J. E.]	Same.

III. Type C.

Naked youth on horse to r.; his shield seen sideways behind him; his head inclined toward the horse's, and his bridle-arm in front of the horse's neck. The horse is stationary, but raises its off fore-leg. In plain ring border.

1. Type described. Beneath horse, Λ . [Pl. III. 5. A. J. E.]	Taras seated sideways on the dol- phin l., his head slightly inclined for- ward.
2. Same. Car. cxii. 170.	Same; but P beneath dolphin.

Obv.

Rev.

3. Same; but **Y**
beneath horse.
Santangelo Coll.

Same as 1.

III. Type D.

Naked helmeted horseman cantering to l. and holding a small round shield behind him.

1. **Λ** below horse.
A. J. E.

Taras seated sideways on dolphin, holding out kantharos. Waves and small fish below, and under fish's tail **Ξ**.

2. Same.
Santangelo Coll.

Taras astride, &c., to l., his further leg outlined in front of dolphin's snout, resting his l. hand on fish's back, and his r. holding trident.

III. Type E.

Naked horseman vaulting from cantering horse to l., holding shield behind him.

1. Beneath horse,
Ι and kylix, in the
centre of which is ap-
parently a represen-
tation of a helmet.

[Pl. III. 9. Cab.
des Méd. No. 1485.]

Taras to r., his l. foot outlined in front of dolphin's snout, holding in r. hand dart, and in l. trident on shoulder.

III. Type F.

Naked horseman galloping r., raising whip behind him.⁷⁸

1. Beneath horse,
OPA.
Car. cxi. 218.
[Pl. III. 6.]

Taras, as a bearded man, seated side-
ways to r. on dolphin, turning round
and aiming trident at cuttle-fish below.
Beneath dolphin, **OPA**.

2. Same.
[Pl. XI. 3. Sant-
angelo Coll.]

Taras as before, but represented as a
beardless youth, and aiming trident at
tunny-fish. No legible inscription be-
neath dolphin.

3. Same; but be-
neath horse **ΞΩΚ**
on an oblong tablet.
[Pl. XI. 4. Sant-
angelo Coll.]

Taras as last, but aiming trident at
cuttle-fish. Beneath dolphin **ΞΩΚ** on
an oblong tablet.

⁷⁸ To be distinguished from Type Q, belonging to the second group of this same Period, where the whip is lowered.

III. Type G.

Naked boy (ἄμφικπιος) on horse walking l., who holds the bridle of a second horse walking beside the other. He is crowned by a small Victory flying behind. The whole in a plain circle.

Obv.	Rev.
1. In f. to l. K . Beneath horse, Φ l. [Pl.III.8. A.J.E.]	Taras seated sideways on dolphin to l. (cf. A 1), turning round to aim trident at tunny-fish. Below, curling waves. In f. to r. A .
2. Same. Car. cxiv. 214.	Same, but no letter in f., the trident with cross-bar at top.
3. Same. [My own specimen from the same die as No. 1.] <i>B. M. Cat.</i> 185. [Pl.III.7. A.J.E.]	Same, but beneath dolphin Λ , and in field, where on coin No. 1 the letter A appears, a square raised tablet without inscription.
4. Same. Car. cxiv. 218.	Taras astride, &c., to l., his l. hand resting on the dolphin's back, and with his r. extending one-handed vase. In f. to l. K . Below, waves.

In the second group, as displaying a fuller and more broad-spread execution, I have included the following types, the first of which belongs to the very beginning of this Period and has, indeed, some claims to be placed within the limits of Period II.

III. Type H.

Naked youth on stationary horse to r., his r. arm hanging at his side, and the hair of his head bound up in a kind of top-knot (*cirrus*), a fashion followed by those who took part in the games.⁷⁹

⁷⁹ See Avellino's note in Carelli, *N. I. V.* p. 48. Visconti, *Mus. Pio Clementino*, T. V. tab. 36. Suetonius, *In Nerone*, c. 58.

Olv.

1. **HE** beneath horse. In front, bearded ithyphallic Herm, his head bound with a fillet.

Car. cxi. 144.

[Pl. III. 10.]

2. Same; but beneath horse, **HΣ**.

B. M. Cat. 105.

Rev.

Taras astride, &c., to l., his body thrown back and its weight supported by his l. arm resting on the dolphin's tail, his right leg thrown forward, so as to be outlined in front of the fish's forehead, holding out in his r. an *cenochoë*.

Samè.

III. Type K.

Naked boy crowning stationary horse to l., which lifts its off fore-leg. The boy has long flowing tresses but the horse's mane is closely cropped.

1. Horse to l.: beneath, a scallop.

B. M. Cat. 139.

[Pl. III. 11.]

2. Same; but no symbol: beneath horse, **AP**.

A. J. E.

[Pl. III. 12.]

3. Same; but Palladium beneath horse.

B. M. Cat. 138.

[Pl. III. 15.]

Taras as a boy with flowing hair, astride, &c., his l. leg thrown forward, so as to be partly visible in front of dolphin's head. Taras holds *kantharos*.

Same; beneath dolphin, **X**.

Same; but no symbol in Taras's hand. Beneath dolphin, **P**.

III. Type L.

Naked Ephêbos vaulting from horse cantering l.

1. Beneath horse, **Λ** (or **Π**).

B. M. Cat. 259:

cf. Car. cxiii. 182.

Taras as a fat child astride, &c., holding out a fish downwards;⁹⁰ his further leg outlined as above. Beneath dolphin, **A**.

2. Same.

B. M. Cat. 261.

Same, but beneath **P**.

3. Beneath horse, **†**.

B. M. Cat. 258.

Taras as an Ephêbos of solid build astride, &c., his further leg outlined, holding crested Corinthian helmet. Beneath dolphin, **†** and waves.

⁹⁰ Poseidôn is represented holding a fish in a similar manner on a fine red-figured amphora (Gerhard, *Trinkschalen und Gefässe*, Taf. xxi.).

Obv.	Rev.
4. Beneath horse, Δ. B. M. Cat. 254.	Same; but holding trident, which rests on l. shoulder. Beneath, K and waves.
5. No symbol or letter. A. J. E.	Taras to r. on dolphin, his further leg outlined in front of fish's head, holding trident in l. hand, and with r. hurling short harpoon. Below, †A.

III. Type M.

Horseman advancing l. in crested helmet, holding reins in r. hand; shield and spear in l.

1. Beneath horse, Δ. B. M. Cat. 198.	Taras holding trident on shoulder (as Type E, 1). Beneath, K and waves.
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III. Type N.

Naked helmeted horseman, his back partially visible, and a shield behind him, cantering r.

1. Beneath horse †. [Pl. XI. 5. Cab. des Méd. No. 1448.]	Taras seated sideways, to l., his l. hand resting on dolphin, and with r. holding out a one-handled vase. Beneath, Γ and waves.
2. Same. De Luynes Coll.	Same, but beneath, A and waves.

III. Type O.

Naked boy, his arm hanging at his side, on horse standing r. and lifting its off fore-leg.

1. Beneath horse, ⊙. B. M. Cat. 106— 107.	Taras astride, &c., behind dolphin, sometimes ⊙.
2. Beneath horse, Γ. A. J. E.	Taras astride, &c., with open palm; outline of further leg just visible in front of dolphin's head.
3. ⊙ under fore-leg; kantharos under horse's body. B. M. Cat. 108; cf. Car. cix. 108.	Same, but Taras holds kantharos.

III. Type P.

Naked boy, his arm hanging at side, cantering, r.

Obv.	Rev.
1. Θ under horse's body. <i>B. M. Cat.</i> 110. [<i>Pl. III.</i> 16.]	Taras astride, &c., with open palm; outline of further leg as above. Behind, sometimes Ο or Θ .

III. Type Q.

Naked horseman galloping r., with whip lowered behind him. (Cf. Type F.)

1. Beneath horse, ΔOP . (<i>B. M. Cat.</i> "AOP.") [<i>Pl. III.</i> 13. Imhoof-Blumer Coll.]	Taras, as a child of full proportions, astride, &c., to l., resting his l. hand on the dolphin's back, and throwing forward his l. leg, so that it is outlined in front of the fish's forehead. In his r. he extends a wreath.
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III. Type R.

Naked horseman wearing crested helmet on prancing horse to r.

Beneath horse, Ο [Θ] and <i>kylia</i> . <i>Car.</i> cxl. 148.	Taras seated sideways to r. on dolphin, holding trident in l. hand. Plain border.
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III. Type S.

Naked Ephēbos cantering l., holding small round shield behind him.

Beneath him, scallop and NI . <i>Car.</i> cxii. 178. <i>B. M. Cat.</i> 202.	Taras astride, &c., to l., his further leg outlined in front of dolphin's forehead, his l. hand resting on fish's back, and with r. extending bunch of grapes.
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III. Type T.

Naked horseman vaulting off cantering horse to l., in circle of waves.

Beneath horse, A . <i>B. M. Cat.</i> 252. [<i>Pl. III.</i> 14.]	Taras seated sideways to r. on dolphin holding trident upwards in r. hand, and with l. resting on dolphin's back.
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PERIOD IV.—ARCHIDÁMOS AND THE FIRST
LUCANIAN WAR.

344—334 B.C.

We have now reached a Period when the evidence derivable from recent finds and other sources enables us to attempt a more exact system of chronology than has been possible in the earlier series. The fourteen years that elapsed between 344 and 330 B.C. embrace some of the most exciting and tragic episodes of Tarentine story. The year 344 was a memorable one in Tarentine annals, for it was at that date that the rich commercial city, hard pressed by its barbarian neighbours, first had recourse to the policy, so momentous in its future developments, of calling in foreign mercenaries and soldiers of fortune to fight its battles. The first summons of the kind was, however, addressed to a quarter which somewhat veiled the real character of the new political departure. The Tarentines, finding themselves unable to cope successfully with their warlike Messapian borderers, who had now begun to receive assistance from the still more powerful Lucanians, turned for help to their Spartan mother-city. Their kinsmen hearkened to their appeal, and the terms of alliance were already concluded in 344, though the actual landing of the Spartan king Archidámos does not seem to have taken place till shortly before 338.⁸¹ In that year Archidámos and the greater part of the forces he had brought with him fell in battle under the walls of Manduria, on the same day and hour, Diodoros tells us, as that on which Philip was winning his "dishonest victory"

⁸¹ Cf. Diodóros, xvi. 62, 63, and 88.



Equestrian Types Period IV. c 344-334 B.C.



at Chæroneia. Four years later Tarentum was again reduced to seek a protector in Alexander the Molossian. The arrival of the Epirote prince at Tarentum forms, as I hope to show, one of the most definite landmarks in the numismatic history of this city. It is possible, as will be seen in the succeeding section, to fix certain gold and silver issues of Tarentum as belonging to the date of the expedition of the son of Neoptolemos in 334 B.C., and this fact reacts on the chronology of the present Period, as enabling us to bring down certain types which have the greatest affinity to these "Molossian" pieces, but which still do not present the Epirote badges found on the latter series, to that approximate date.

The policy on which the Tarentines had now definitely embarked of hiring foreign *condottieri* to fight their battles for them entailed a constant drain on the Tarentine treasury, and it was no doubt in a great degree to meet the demands of foreign mercenaries that, during this period, Tarentum began for the first time to issue a gold coinage. The recent discovery, to which we shall have occasion to return,⁸² of a hoard of gold Tarentine and Macedonian staters, has thrown a new light on the gold coinage of Tarentum belonging to the Period that succeeds the expedition of the Molossian Alexander. But the types discovered in this hoard are by no means the earliest of the Tarentine gold issues, though in some respects they fit on to them, and we have therefore solid grounds for referring the earliest gold coins of the city to the present Period.

From their style alone there can be little doubt that in the beautiful pieces reproduced in Pl. V. 1 and 2, are to be

⁸² See p. 97, *seqq.*

recognised the earliest gold staters of Tarentum. Both display as their obverse design a noble head of Dêmêtêr or Persephonê-Gaia, with *stephanê* and diaphanous Tarentine veil, the *Ταράντιον* or *Ταραντινίδιον*, that seems to have been woven from the gauzy tissue of the Pinna-shell, a form of textile industry still pursued by the inhabitants of modern Taranto. In one instance (Pl. V. 2) this design is accompanied on the reverse by a boy-rider crowning his steed, beneath which is an exquisite and naturalistic representation of a purple-shell or *murex*.⁸³ In the other case (Pl. V. 1) we find the head of the goddess associated with a reverse, exhibiting the infant Taras raising his hands in suppliant guise to his father Poseidôn, who, seated on his throne, graciously inclines his head towards his little son.⁸⁴ This design may, perhaps, be regarded

⁸³ "Τὸ δὲ Ταράντιον ἐξ οὗ διαφανῶς ἡ ὄρα διέλαμπε." Aristænetos, *Ep.* i. 25. Cf. Lorentz, *De Civ. Vet. Tarentinorum*, p. 26, 27. The head itself, the *stephanê* and arrangement of the hair, present a great resemblance to some beautiful terra-cotta heads of Persephonê-Gaia, recently discovered on the site of a temple of that goddess at Taranto (see *Hellenic Journal*, vol. vii. 1886, p. 28, Pl. lxiii.). In some cases there were traces of a veil. I am quite unable to subscribe to the view (*Notizie dei Scavi*, 1886, p. 279), that the head on these coins represents the nymph Satyra. On a fine Metapontine silver coin presenting a similar head (*v. infra*), the name ΔΑΜΑΤΗΡ is attached.

⁸⁴ In some cases there appears, as in Plate V. 2, a round shield in the field above; in others a rudder. Beneath the horse is the inscription ΚΥΛΙΚ. It is possible that we may in this case, as probably in the slightly later "Molossian" gold pieces inscribed ΑΡΟΛ, have to do with a magistrate's name; and in that case signatures of this class occur on the gold coinage of Tarentum at a somewhat earlier date than on the silver. (See p. 115.) Fiorelli, *Oss. sopra talune monete rare di Città greche* (Nap. 1848, p. 28), makes the fanciful suggestion that the inscription should be read

as, on the whole, the finest product of Tarentine monetary art. There is still about the majestic attitude of Poseidôn a lingering tradition of the scheme of the seated Dêmos on the earlier didrachm series which, as well as the surpassing beauty of the whole composition, leads us to regard this as the earliest of all the gold types of Tarentum. And if we recall the special character which Poseidôn bore at this city, it will not, perhaps, be considered over bold if we venture to bring this filial appeal of Taras to his father into direct relation with the appeal of Tarentum to its Lacedæmonian fatherland which in 338 found its answer in the landing of King Archidâmos. The Poseidôn worshipped at Tarentum was in fact the Poseidôn of Tænaron, who stood forth as the representative of Laconian maritime power; and so preponderant was this side of the Tarentine cult that the priests of Poseidôn were here called *Ταυραπιστάι*.⁸⁵ It is further to be observed in this connexion that behind the seated figure of Poseidôn on the present coin is seen the star of one of the Dioskuri, the protecting genii of Lacedæmon. There is certainly a fellow-feeling between this exquisite composition and that of the inscribed Corinthian mirror on which the nymph *ΛΕΥΚΑΞ* crowns her parent city *ΚΟΡΙΝΘΟΣ*, personified as Zeus, her mythic sire.⁸⁶

The minute signature *K*, which appears within Poseidôn's throne on some examples of this fine coin, is of

ΚΥΑΙΩΝΟΣ; and that the shell or *Κορυαίον* should be regarded as a punning allusion. The murex in the sense of a "whorl-shell," however, may very possibly have been adopted by *ΚΥΑΙΚ* . . . as a *type parlant*.

⁸⁵ Hésychios, *Lexicon*, s.v. Cf. p. 14.

⁸⁶ See especially Prof. P. Gardner, *Hellenic Journal*, ix. 62 ("Countries and Cities in Ancient Art").

great interest in its relation to the same signature on some of the finest silver types of the present Period, at times, as we shall see, taking the more expanded form of **KAA**, in which I have ventured to recognise the first letters of the name of an engraver who was also active at this time in the Tarentine colony of Hêrakleia and in the neighbouring city of Metapontion. These parallels become the more significant when we find the beautiful obverse head of Dêmêtêr, peculiar to these Tarentine gold staters, closely reproduced with the same diaphanous veil, but with a corn-wreath in place of *stephanê*, and with the name **ΔAMATHP** attached, on a fine contemporary didrachm of Metapontion,⁸⁷ presenting on its reverse side the signature of the artist **KAA** . . .

If we turn to the didrachm series that, according to our approximate calculation, covered the same period of years as these earliest gold issues of Tarentum, we shall in fact find more than one point in common with the coins that I have ventured to associate with the name of Archidâmos. The picturesque style of art represented on the gold staters by the head of Dêmêtêr, with her luxuriant tresses and transparent veil, or the group of Taras and his father, harmonize well with the prevailing style of the silver coinage.

Period IV. of these equestrian types, with which we are now called on to deal, includes a space of years during which the engraver's art was maintained at the same high level that it had attained towards the conclusion of the preceding Period. In considering some of the noblest types of Period III., attention has already been called to the evidence they supply of the influence of the greater works of sculpture and painting. In the present class,

⁸⁷ Garrucci, Tav. ciii. 5.

although the sculpturesque element, especially that derived from bronze work, is by no means wanting, it is the limner's art that seems to have exercised the predominant influence. Greater variety in the design is secured by the introduction of new figures, and for pictorial effect Type E (Fig. 2), in which Taras is represented with his chlamys fluttering about him in the wind, while a small Victory flies forward and reaches forth a wreath to crown his brows, is almost unrivalled in the Tarentine series.



Fig. 2.

It is now for the first time that full mobility and freedom of execution is attained in the rendering of the horses. To this and the succeeding Period unquestionably belong the most magnificent and, at the same time, the most animated of the equestrian figures.

As already noticed,⁸⁸ the scheme first found in Period III. of Taras sitting sideways on his dolphin and turning round to aim his trident at the fish below, recurs on two rare coins (Types A 1 and F 1) belonging to the beginning of the present group, on which, however, the head of Taras is seen three-quarters facing instead of in profile. The persistent scheme of the preceding Period, in which Taras appears with his further leg thrown forward so that its outer line is just visible in front of the dolphin's forehead, forms a natural morphological link to a similar scheme of Taras as he appears on the present series.⁸⁹

⁸⁸ See p. 50. [Pl. III. 6.]

⁸⁹ Type C 1 and 2.

The noble transitional scheme seen on the reverse of Type A 2 links this group of coins to another and finer series, which I have placed together under Type H of the present Period (Pl. IV. 9—11). All of these are associated on one or both faces with the signature **KAA**, sometimes in association with **API** or **ΦΙ**, and exhibiting Taras astride on his dolphin steed, with the heel of the further leg drawn back slightly behind the other. In some respects these coins represent the highest development of artistic execution to be found in the whole series of Tarentine issues. They are certainly the most imposing. In the rendering of the Eponymic Hero, here always given as a full-grown Ephēbos, a golden mean is observed between the somewhat heavy proportions of the older canon, as we find it still on some types of the present Period, and the over-attenuation of the style which came into vogue soon after this date. There is a largeness about these noble types of Taras which produce an impression quite disproportionate to the narrow compass of the coins. It is interesting to observe that the scheme of the arms and the upper part of the hero's body is practically identical with that of the fine types signed **A** and **K** of the preceding Period, the Hērakleian origin of which has been suggested above;⁹⁰ and this conformity supplies an additional reason for identifying these signatures with the **API** and **KAA** of the present series.

The consideration of this beautiful group signed **KAA** leads us to the remarkable piece which I have placed under Type G (Pl. IV. 7), which supplies one of the most convincing examples of an engraver's signature on a Tarentine coin. On the type in question we find the same

⁹⁰ See p. 52, *seqq.*

signature, **KAA**, associated in minute letters with the highly-finished and elaborate design of the armed horseman received by Victory—an admirable composition, which was imitated, as we shall see, at a somewhat later date, and in a bolder style. The signature itself appears in almost microscopic characters between the horse's hind legs, and again beneath the dolphin on the reverse. In another case we see (L, Pl. IV. 8), the horse and rider received by a standing Ephēbos. Affinity of subject, as well as the signature which at times appears on the reverse, links these to another of the most exquisite types (F, Pl. IV. 5, 6) of the present class, that, namely, on which a boyish figure is seen embracing the prancing steed of a still smaller boy-rider, with a warmth of affection as characteristically Italian in its expression as that of the children clustering round to kiss the legs and arms of the slayer of the Minotaur on the Herculean fresco. In the present case, as is shown by the flying Victory behind, it is the winner of a race who is thus saluted.

In the case of the two last coins a most remarkable parallel is presented to the two pieces of the preceding Period (Pl. III. 7, 8) that have already on other grounds been referred to the same artistic collaboration as makes itself apparent on the present group. In the former instance we see the signature **A** alternating on otherwise identical reverses with a small raised tablet. In the present case the signature **K** which appears in the field behind Taras on his dolphin on Type F 3 (Pl. IV. 5), is replaced on the similar reverse of Type F 4 (Pl. IV. 6), by a raised tablet of the same kind, the **K** itself, however, being repeated in this instance in front of Taras. This coincidence must be taken as a further proof of the intimate connexion of the two engravers of this and the preced-

ing Period who sign **A** or **API**, **K** or **KAA**. In Type F 5, we find the signature **K** associated with a scallop-shell instead of the tablet, which recalls the fact that on the Hêrakleian coin (Fig. 1, p. 54) already adduced, as in all probability the handiwork of an artist who signs as **K** or **KAA** on the Tarentine dies, the signature **KAA** is seen associated with the same scallop symbol.

These types signed **K** and **KAA** must rank, alike for design and execution, amongst the most perfect products of the Tarentine mint, and are, as already suggested, in all probability to be referred to the same artist who, on the gold staters described above, attaches the signature **K** to the beautiful group of Taras and his father Poseidôn. Nor was the activity of this engraver by any means confined to the Tarentine dies. The same signature, as we have already seen, is found at Hêrakleia associated with the fine design of Hêraklês strangling the lion⁹¹; and at Metapontion it appears on the coin bearing on its obverse the head of Dêmêtêr, with her name **ΔAMATHP** attached;⁹² and again on another beautiful piece of the same city, beside the three-quarter face representation of the youthful Dionysos ivy-crowned,⁹³ a type which has much in common with the three-quarter head of Apollo on a fine

⁹¹ *B. M. Cat.*, Heraclea, 28, 29. See p. 54, Fig. 1.

⁹² Garrucci, *Monete dell' Italia Antica*, T. ciii. 5. The head of Dêmêtêr, with the diaphanous veil hanging down behind, closely corresponds with that on the Tarentine gold staters of Archidâmos and Alexander the Molossian's time. The *stephanê* however, is here replaced by a corn-wreath.

⁹³ A blundered representation of this almost unique type, with both obverse and reverse inscription wrongly given, is engraved in Garrucci, *op cit.* T. civ. 13. I recently obtained a fine specimen of this piece at Ruvo (Rubi) in Apulia. The obverse legend is **KAA** (in Garrucci, "**MOA**") the reverse, **ΦΙΛΟ** (Garr. "**Φ**").

silver diobol struck by the Molossian Alexander in Italy.⁹⁴ On another Metapontian piece, indeed, the signature **KAA** appears on the reverse of a type exhibiting the oak-crowned head of the Dodonæan Zeus, which must undoubtedly be brought into relation with the landing of the Epirote prince.⁹⁵ We have thus an interesting indication that the activity of this engraver continued at least to the approximate date 334 B.C. The fellow-engraver who signs **API** is probably, as already pointed out,⁹⁶ the artist who, on Hêrakleian and Metapontian pieces contemporary with those cited, reveals the full form of his name, **APIΞTOΞENOΞ**. This Aristoxenos must have been the contemporary of the well-known Tarentine philosopher and musician of that name, the pupil of Aristotle.

The synchronism established by the Metapontian coin already cited, is further borne out by some independent evidence supplied by some Tarentine gold staters and didrachms with "Molossian" types and symbols. The noble obverse types, presenting the same signature, **KAA** [Type H; Pl. IV. 9—11], in which there appears for the first time the well-known scheme of the horseman lancing downwards on his prancing steed—a design of such frequent occurrence on the Tarentine issues of the succeeding age—can in fact be also approximately dated from their affinity to a type struck at the time of the Epirote Alexander's expedition. The scheme as it appears on the present group of coins differs from the later series, on which the same representation occurs, in a particular which is not without its chronological value. The horseman is here seen surrounded by a beaded border, an early characteristic which soon after this time wholly

⁹⁴ Pl. V. 7.⁹⁵ See p. 82.⁹⁶ See p. 54.

disappears from the Tarentine dies. The same border, however, surrounding the same horseman type, is found on a Tarentine gold stater struck, as I hope to show, at the time of Alexander the Molossian's arrival, and again on the contemporary didrachm series already referred to as presenting the Molossian symbol. The close relation existing between the coins of the present group signed **KAA** and these Molossian types shows that their issue is to be referred to the years immediately preceding 334 B.C.

The reverse of these coins, on which the Eponymic Hero of Tarentum is seen, between the two eight-rayed stars that symbolize the Dioskuri, pensively contemplating a heroic helmet that he holds between his hands, is of a highly suggestive character. The two stars occur again above the riding figures of the Dioskuri on some gold types of the succeeding Period (Pl. V. 10) in which I have ventured to trace a reference to the renewed alliance at that time concluded between Tarentum and its mother-city.

May we in the twin Tyndarid emblem on the present types, as on the gold coin depicting Taras and his father Poseidôn, venture to trace a kindred reference to the earlier alliance with Lacedæmon?

The comparison with the coins struck at Tarentum at the time of the coming of the Molossian Alexander enables us, as we have seen, to refer this beautiful series to the years preceding the date 334 B.C. In 338 B.C. the Spartan King Archidâmos met a hero's death before the rock-hewn trenches of Manduria,⁹⁷ and that his fall should have received a numismatic tribute at the hands of the Tarentines will seem the more pro-

⁹⁷ Diodôros, xvi. 63, "ἐν τινὶ μάχῃ διαγωνισάμενος λαμπρῶς ἐτελεύτησεν."

bable when taken in connexion with the other honours which, as we learn from historic sources, were paid by them to his memory. Theopompos⁹⁸ informs us that the body of the Spartan king was left on the field of the disaster, but that so desirous were the Tarentines of showing him funeral honours that they vainly offered a large sum of money for the recovery of the hero's corpse. For the same reason he alone among the Spartan kings received a monument at Olympia. The attitude in which Taras upon these coins contemplates the casque that he holds between his hands, his head slightly bowed as that of a mourning leave-taker on a monument of the Kerameikos, might itself suggest that in this highly artistic composition we have a graceful allegoric tribute to the death of the Spartan hero.⁹⁹ Appearing as it does upon the Tarentine dies at such a time of national disaster and of unsatisfied desire to commemorate the fallen with a worthy monument, this personification of the Tarentine city between the

⁹⁸ *Ap. Athenæum*, lib. xii. (ed. Schweighauser, iv. 492), "Ἀρχίδαμος ἐν τῷ πολέμῳ ἀποθανὼν οὐδε ταφῆς κατηξιώθη, καίτοι Ταραντίνων πολλὰ χρήματα ὑποσχομένων τοῖς πολεμίοις ὑπὲρ τοῦ ἀνελεῖσθαι αὐτοῦ τὸ σῶμα." From Pausanias, vi. 4, 9 (cf. vi. 18, 7), we learn that the want of a tomb was in some measure supplied by a monument at Olympia.

⁹⁹ The type was revived in a somewhat variant form at the date of Pyrrhus's expedition, Taras in this case being, as I hope to show (p. 149), assimilated in pose and *coiffure* to the Apollo on contemporary coins of Antiochos I., and holding in his hand, moreover, a horned helmet of Seleukid type. The reason of this complimentary allusion is to be found in the pecuniary assistance lent by Antiochos to Pyrrhus and the Tarentines; and the helmet, in all probability, is to be interpreted as conveying a respectful tribute to Seleukos Nikâtôr, then recently deceased. If this supposition be correct, we obtain a further warrant for regarding the figure on the present coin as having a memorial character.

two tutelary stars of the Spartan mother-city could hardly be without allusive significance to a hero of whom himself it might be truly said :

“ Ἀστὴρ πρὶν μὲν ἔλαμπες ἐνὶ ζωοῖσιν ἔϋος
 Νῦν δὲ θανῶν λάμπεις ἔσπερος ἐν φθιμένοις.”

IV. Type A.

Naked boy rider to r., crowning stationary horse which raises off fore-leg, and crowned himself by flying Victory.

Obv.	Rev.
1. Beneath horse, AP. Garr. T. cxviii. 28.	Taras to r. as an Ephēbos, seated sideways on dolphin, and turning round to strike with his trident a tunny fish below. The whole design enclosed in a circle of waves.
2. Beneath horse, IM. [Pl. IV. 2.]	Taras, as an Ephēbos of somewhat finer proportions to 1., on dolphin, his further leg drawn up and visible to the knee. His left hand lightly rests on the fish's back, holding a trident, the lower end of which rests on his ankle. With his r. he extends a kantharos. Beneath dolphin HP , and curling waves.

IV. Type B.

Naked boy crowning his horse, which stands r., raising its off fore-leg.

1. Beneath horse, K and club. Car. cxii. 163. [Pl. IV. 1.]	Taras to l. riding on dolphin, holding in l. hand a trident and small round shield, and with his r. extending a kantharos. Beneath, Ω and waves. Plain ring border.
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IV. Type C.

Naked boy crowning standing horse, as on Type B, but beneath is another naked boy picking a pebble out of the horse's hoof.

Obv.	Rev.
1. In f. to r. Φ . A. J. E.	Taras, as an obese youth astride dolphin, his further leg thrown forward and outlined along fish's head; he holds in his r. hand a kantharos, and in his l. a small round shield and trident. Beneath, Ξ and waves.
2. Same. Car. cxiv. 217.	Same; but no trident. Beneath, Π and waves.
3. Same. [Pl. IV. 3.]	Taras as an obese youth seated sideways on dolphin, holding in r. hand kantharos, and in l. trident and small round shield (as 1 and 2). Beneath, Ξ and waves.
4. Same. Car. cxiv. 218.	Same, but no letter. Beneath dolphin, waves.
5. Same. B. M. Cat. 184.	Same, but Π ; beneath dolphin, waves.

IV. Type D.

Naked warrior standing behind his horse r., helmeted, and holding spear and large round shield.

1. In f. to r. Γ . Car. cxi. 143. [Pl. IV. 4.]	Taras seated sideways on dolphin to l., holding trident in r. hand, and with l. small round shield. Beneath, Λ and waves.
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IV. Type E.

Horseman in crested helmet, with chlamys flowing behind him, holding shield in his l. hand and a lance, point upwards, in his right, a prancing horse to r.

1. Beneath horse, $\Delta\Lambda\Gamma$. Car. cxi. 138. <i>Mus. Naz. di Napoli</i> . 1898. [Cf. Garr. T. cxviii. 20. Obv. " $\Delta\Lambda$." Rev. " Λ ."] [Pl. XI. 7.]	Taras astride, &c., to l., his chlamys flowing behind him. His l. hand rests on dolphin's back, and his r. holds a trident, while a small Victory flies forward to crown him. Beneath, waves and Γ . [See Fig. 2, p. 69.]
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IV. Type F.

Naked boy crowned by flying Victory on prancing horse to r., which is embraced by another naked boy. Design in beaded circle.

Obv.	Rev.
1. Ι beneath horse. [Pl. XI. 6. Santangelo Coll.]	Taras seated sideways on dolphin to r., turning back to aim his trident at tunny-fish. Beneath, waves. In f. to l., Ε , and under Taras's r. arm a square raised tablet.
2. Same; but K beneath horse. Cab. des Méd.	Same: but in f. Ι .
3. Same; but Ι . Car. cxi. 150. B. M. Cat. 172. [Pl. IV. 5.]	Taras astride, &c. to l., extending one-handled vase. Behind, K .
4. Same. Leake Coll. [Pl. IV. 6.]	Same; but K in front of Taras, and behind, a square raised tablet.
5. Same. Car. cxi. 149.	Same; but scallop in place of tablet.

IV. Type G.

Naked horseman in crested helmet to l., holding in his l. hand behind him two lances and a round shield, on which is a hippocamp. In front, winged Victory, clad in diploëdion, advancing l., turns half round and seizes the rearing steed by the rein and forelock.

Above, TAPAN- TINΩN in minute letters. In f. to r. FA . Beneath horse, M and KAA in minute letters. Santangelo Coll. Of. Car. cxii. 167. B. M. Cat. 272. [Pl. IV. 7.]	Taras astride, &c., to r., throwing forward l. leg, hurling dart with r., and in his l. holding two spears or lances, while his chlamys, caught on his l. arm, streams in the wind. Beneath, KAA in minute letters, and waves.
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IV. Type H.

Naked horseman on prancing horse to r., lancing downwards with r. hand; behind, a large round shield and reserve of two lances; the whole within a beaded border.

Obv.	Rev.
1. In f. to l., † ; to r., A . Beneath horse, KAA . A . <i>B. M. Cat.</i> 213. [<i>Pl. IV.</i> 11.]	Taras astride on dolphin, holding a crested helmet between his hands, with his head slightly bowed towards it. In f., on either side, an eight-rayed star. Beneath, dolphin ΦΙ .
2. Same. <i>B. M. Cat.</i> 210. [<i>Pl. IV.</i> 10.]	Same. Beneath dolphin, API .
3. Same. <i>B. M. Cat.</i> 211.	Same. Beneath dolphin, KAA .
4. Same. <i>Nervegna Coll.</i>	Same. Beneath dolphin, ONA .
5. Same; but in f. to l. A , to r. N . Beneath horse, KAA . X . <i>Car. cxii.</i> 159. <i>B. M. Cat.</i> 212. [<i>Pl. IV.</i> 9.]	Same: but no stars. Beneath dolphin, KAA .
6. Same; in f. to r., N . Beneath horse, KAA . N . <i>Car. cxii.</i> 160. [<i>Pl. XI.</i> 8. <i>Cab. des Méd.</i>]	Taras astride, &c., to l., his further leg outlined in front of dolphin's head. He holds in his l. hand a small round shield, displaying a hippocamp, and extends his r. to receive a small wreath-bearing Victory. In f. to r., K . Beneath, dolphin, waves, and small tunny-fish.

IV. Type K.

Two Dioskuri cantering, r.

1. Above TAPAN Beneath horse, KAA . Microscopic letters. (<i>Nervegna Coll.</i>)	Same as H. 6. Taras holds two spears and hippocamp shield. Beneath, KAA and waves.
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IV. Type L.

Naked male figure standing l., and half turning round to seize forelock and bridle of stationary horse, his l. hand, which is laid on the bridle, holds a wreath. On the horse is a naked boy. The whole in a minutely beaded border.

Obv.

1. Above, **TA-PANTINΩN**. In f. to l., **†**; to r., **Δ**. Beneath horse, **KAA**. Microscopic letters. [Pl. IV. 8, Santangelo Coll.]

Rev.

Taras as an Ephēbos riding on dolphin to r., his further leg resting on the fish's forehead; he holds out in his l. hand a strung bow and two arrows, and in his r., behind him, another arrow. Beneath, **ΦΙ** in microscopic letters.

PERIOD V.—FROM THE MOLOSSIAN ALEXANDER TO THE SPARTAN KLEONYMOS.

334—302 B.C.

The continued progress of the Lucanian, Messapian, and other allied barbarian tribes once more induced the Tarentine in the true spirit of a mediæval Italian Republic to look abroad for the services of some princely *condottiere*. A suitable champion was found in the Epirote King, the Molossian Alexander, son of Neoptolomos, who, through his sister Olympias and his wife Cleopatra, was doubly related to his great namesake of Macedon, and whose ambition was already aroused by his kinsman's growing fame. Blind to the true meaning of his own Dodonæan oracle, which bade him shun Pandosia and the waters of Acherôn,¹⁰⁰ the would-be Alexander of the West set sail for Italy in 334¹⁰¹ with fifteen war-ships and numerous transports. The Tarentines, however, were

¹⁰⁰ 'Αιακίδη προφύλαξο μολεῖν Ἀχερούσιον ὕδωρ
Πανδοσίαντε ὅτι τοι θάνατος πεπρωμένος ἐστί."

¹⁰¹ For the chronology of the Molossian Alexander's expedition, cf. Droysen, *Geschichte des Hellenismus*.

not long in recognising in their new ally one who threatened to become their master. The Molossian Prince not only routed their immediate neighbours, the Messapians and Daunians, but carrying his arms to the Tyrrhene shores, had already defeated the allied Lucanians and Samnites in a great battle at Pæstum, and concluded an alliance with Rome against the common foe. He was already too powerful for the jealous Tarentine Republic, and the causes of rupture were not far to seek. Alexander had recovered the Tarentine colony of Hêrakleia, the seat since Archytas's time of the federal council of the Italian Greeks, from the hands of the barbarians, only to retain it under his own dominion, while at the same time he transferred the seat of the Assembly to a site on the territory of the more distant Thurioi.¹⁰² When the Epirote King started on his final campaign against the Bruttians open hostilities seemed about to break out between him and the Tarentines, and the task of observing their movements in Alexander's interest was confided to their Metapontine neighbours. The death of the Molossian in 330 B.C. beneath the walls of the Italian Pandosia, and beside the waters of the Italian Acherôn, brought nothing but a sense of relief to the Tarentines.

The brief but glorious Italian adventure of the Epirote Alexander is of great importance in the history of the Magna-Græcian coinages, for which it supplies more than one landmark. Alexander's arrival at Tarentum is, perhaps indirectly, connected with the first issue by this city shortly after this time, of a class of gold staters pre-

¹⁰² Strabo vi. 3. "ὁ γοῦν Ἀλέξανδρος τὴν κοινὴν Ἑλλήνων τῶν ταύτῃ πανήγυριν, ἣν ἔθος ἦν ἐν Ἡρακλείᾳ συντελεῖν τῆς Ταραντίνης, μετάγειν ἐπειράτο εἰς τὴν Θουρίαν κατὰ ἔχθος, ἐκελευέ τε κατὰ τὸν Ἀκάλανδρον ποταμὸν τειχίζειν τόπον, ὅπου ἔσονται αἱ σύνοδοι."

senting the Macedonian types of the youthful head of Hêraklês with a biga on the reverse. These coins continued to be issued in association with other gold types at a considerably later date,¹⁰³ but the occurrence on some of them of the Epirote symbols of the thunderbolt and lance-head may incline us to refer the earliest issues to the time of the Molossian's expedition. There is, however, as we shall see, more certain evidence of the connexion of the son of Neoptolemos with the Tarentine gold coinage.

Alexander himself signalized his arrival by striking coins both of gold and silver in his own name. These noble pieces have a distinctly Italo-Greek character, and are generally supposed to have been struck at Tarentum itself. That this is true of some of them need not be disputed, but historical considerations preclude us from supposing that the later of the Molossian's Italian issues were struck at this city.

It is probable that some at least of these were struck at Metapontion, which city, as we have already seen, remained the bulwark of Alexander's power in the South-West at a time when the Tarentines were turning against him. The nearest parallel to the Italian types of the Epirote adventurer is in fact supplied by some fine didrachms of Metapontion, presenting on the obverse the oak-crowned head of the Dodonæan Zeus accompanied by a thunderbolt in the field.¹⁰⁴ On another Metapontine didrachm, evidently belonging to the same time, the head of Zeus is laurel-crowned and accompanied, as upon the

¹⁰³ See pp. 99, 209.

¹⁰⁴ Car. clii. 54. *Rev.* Corn-spike; *inscr.* ΜΕΤΑΓΟΝ, and in f. to r. ΚΑ. . . (on others ΚΑΛ).

Syracusan coins of the same approximate date, by the inscription **ΕΛΕΥΘΕΡΙΟ** ξ .¹⁰⁵

This latter type also suggests comparisons with a class of Locrian didrachms¹⁰⁶ on which, moreover, the treatment of the hair of Zeus presents a striking resemblance to that upon the Molossian coins. What spécial part may have been played by the Epizephyrian Locrians in Alexander's expedition history fails to record, but the numismatic parallel is by no means confined to the head of Zeus. The thunderbolt that forms the reverse type of the Italian coins of the son of Neoptolemos recurs upon these Locrian pieces alternating with the seated eagle, which in the series struck by the Epirote prince is the almost invariable symbol in the field; there is, moreover, one small Locrian coin which presents the distinctive characteristics of a class of alliance pieces struck at the time of this Molossian connexion.¹⁰⁷ The widening breach between Alexander and the Tarentines, as well as the Western range of his military operations, makes it impossible to suppose that his later issues at all events were struck at Tarentum, and considering that his last campaign was directed against the Bruttians, it is highly probable that at this time he may have had recourse to Locrian moneyers, perhaps even to Syracusan.¹⁰⁸

¹⁰⁵ Gar. cii. 34.

¹⁰⁶ Car. clxxxix. 6—11.

¹⁰⁷ See p. 87. Garr. T. cxii. 20.

¹⁰⁸ The similarity of some Locrian didrachms to Alexander's types inclines me to go a step farther and detect in the well-known Syracusan bronze struck soon after the date of Timoleon's expedition, representing on the obverse the head of Zeus Eleutherios, and on the reverse the thunderbolt and seated eagle, exactly as it appears on the Molossian's coins, a direct tribute to the Western Alexander, the heaven-sent champion of the

That the earliest coins of the Molossian in Italy were struck at Tarentum there can, however, be little doubt. We possess, indeed, direct numismatic evidence that Alexander concluded a monetary convention with the Tarentines, in which the Rubastines¹⁰⁹ and probably other cities joined. There exist some small Tarentine gold pieces only .3 inch in diameter, and weighing a little over six and a half grains [Pl. V. 5], showing on the obverse side a rayed full-faced head of Hêlios, and on the reverse a thunderbolt with the inscription above and below it—**ΑΡΟΛ ΤΑΡΑΝ**.¹¹⁰

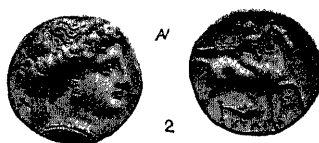
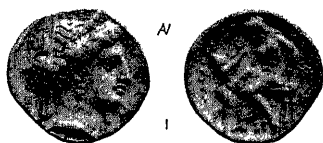
A small silver coin with a similar head of Hêlios was struck at Rubi, in Apulia,¹¹¹ and must certainly be regarded as an alliance-piece. But the great interest attaching to the Tarentine type is due to the fact that it in every way resembles certain coins of the Molossian prince struck during the Italian expedition. These coins are of the following types:—

Italiote Greeks against the barbarians, who certainly included Sicily in his far-reaching schemes. The head of Zeus, with the inscription **ΕΛΕΥΘΕΡΙΟΞ**, on the Metapontine piece already described, strongly corroborates this view.

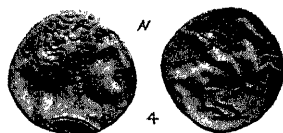
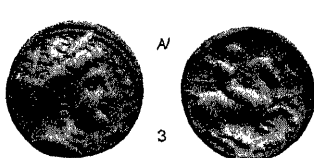
¹⁰⁹ See Avellino, *Epistola de Argenteo Anecdoto Rubastinorum Numo*, Naples, 1844. The parallelism between the small gold pieces of Tarentum, signed **ΑΡΟΛ**, and those of Alexander the Molossian, was pointed out by Millingen, *Unedited Coins of Greek Cities and Kings*, p. 11.

¹¹⁰ See Pl. V. 5; cf. *B. M. Cat.* 30, 31, 32, where the weights are respectively 6.7, 6.5, and 6.6 grs. Garrucci, *T.* c. 57, 58, one reads **ΤΑΡ ΑΡ**. This **ΑΡΟΛ**... must not be confounded with the magistrate who signs **ΑΡΟΛ. ΑΡΟΛΛΩΝ** in Pyrrhus's time, or the **ΑΡΟΛΛΩΝΙΟΞ** of Period VIII.

¹¹¹ *Rev.* **PY** on either side of two crescents; above, **ΑΛ**; between the crescents, two dots. *B. M. Cat.*, Rub. No. 4; Garrucci, *T.* xciv. 26.



c. 340 B.C.



Time of Alexander the Molossian, 334-330 B.C.



Coins struck by Alexander the Molossian
at Tarentum 334 B.C.



Alliance Coin of
Rubastini B.C. 334.

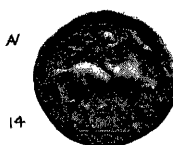


c. 302-281 B.C.



c. 315 B.C.

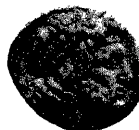
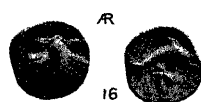
c. 315 B.C.



c. 300 B.C.



c. 281 B.C.



Silver Litrae and Gold Stater with Pyrrhic Symbols, 281 B.C.

Obv.	Rev.
1 <i>A</i> . Rayed head of Hêlios, as above. [Pl. V. 6. B. M.]	ΑΛΕΞ and thunderbolt.
2 <i>A</i> . Same. [Pl. V. 7.] ¹¹²	ΑΛΕΞΑΝΔΡΟΥ ΝΕΟΠΤΟΛ above and below thunderbolt.

Here, then, we have monetary evidence of an alliance concluded, about the year 334, between the Tarentines, Rubastines, and the Epirote prince. But the contemporaneity thus established of these small Tarentine gold pieces signed ΑΠΟΛ with the first period of Alexander's Italian sojourn enables us to fix the approximate date of the following gold staters (Pl. V. 3 and 4), on which the same signature appears, associated in the field with the thunderbolt symbol:—

ΤΑΡΑ. Veiled head of Dêmêtêr or Persephonê-Gaia to r., crowned with stephanê. Dolphin in field, r. Carelli, T. ciii. 10. [Pl. V. 3, 4.]	Naked horseman, with reserve of round shield and two lances, lancing downwards, on prancing horse. In field, r., thunderbolt; beneath horse, ΑΠΟΛ or ΑΓ.
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The exquisite head of the Chthonic goddess, with her diaphanous veil, on the obverse of this coin, is identical in character with the same head on the stater already referred to, which exhibits on the reverse the figures of Taras and his father Poseidôn. Reasons have been adduced for believing that this latter gold stater belongs to the time of Archidâmos' expedition, and may be approximately referred to the year 338, a date which agrees very well with the slightly later issue of the present coin, with the same

¹¹² From the Sim Collection; weight, 17·7 grs.

obverse type, but with a new reverse presenting the thunderbolt symbol in the field—a complimentary allusion¹¹³ to the advent of Dodona's lord in the city of Taras. This symbol, as we have seen, is equally characteristic of the small alliance pieces and of the gold staters of Macedonian type that also make their appearance at Tarentum about this time.

The type of the horseman lancing downwards, as seen on these "Molossian" gold staters, is a familiar feature on a considerable series of Tarentine didrachms. It first appears in the case of the beautiful coins signed **KAA**, already mentioned as representing some of the latest issues of Period IV.; it is only, however, during the present Period that it becomes general, and, indeed, almost universal. In the ensuing series it is less frequent, and about the time of Pyrrhus it disappears entirely from the Tarentine dies. In the case of our gold staters, however, there is an adjunct which reduces the field of comparison to very narrow limits. The whole design is here surrounded by a beaded circle, which has been already noticed as an early characteristic associated with the first silver issues of this lanceman type struck at the close of Period IV. On the later issues of this type it is entirely absent. It occurs, however, on a remarkable group of coins, exhibiting the same design, which I have placed together as Type A of the present Period, and which, from their close affinity to the latest coins struck during Period IV., must be regarded as representing its earliest issue.

¹¹³ Compare the elephant symbol which appears below the type of later Tarentine coins, to commemorate the arrival of Pyrrhus.

But the connexion thus established between this didrachm type and the gold stater of Alexander the Molossian's time is borne out by a still more interesting particular. The small group of coins which I have included in Type A are distinguished from all other Tarentine issues by a symbol which might by itself be regarded as sufficient ground for bringing them into relation with the Epirote prince. Each and all of these five coins display in the field a seated eagle with folded wings, a characteristic Molossian device which occurs as the principal type on the coins of the Molossian Commonwealth struck immediately before Alexander's time, and which he himself perpetuated on his bronze Epirote coinage. As a symbol it admirably personified the settled and indwelling divinity of the Dodonæan oak—that Zeus Naïos, "the abider,"¹¹⁴ whose oracle the Molossian had so fatally misread. Alexander, however, was not unmindful of his national emblem in his trans-Adriatic enterprise, and the seated eagle appears beside the thunderbolt in the field of most of his Italian silver pieces. That it was used, moreover, by his Italian allies as a federal badge appears from a small Locrian silver piece,¹¹⁵ which, from its analogy with the other small alliance pieces already described, must be placed in the same category. Its obverse type, a thunderbolt, with **ΑΟΚ** above and two annulets below,

¹¹⁴ It is impossible not to believe that this was the underlying idea of the epithet *ναῖος*, as applied to the Dodonæan Zeus in early times. Homer, *Il. ii.* 233, harps on the aspect of Zeus as the "dweller," and of his *ἰποφῆται*, "dwelling" round him. The scholiast's explanation of *ναῖος* as "flowing," or "watery," was certainly not the Homeric sense. Settled dwelling is the root idea of all tree-divinities. The god is first the tree itself; afterwards the tree is the god's abiding seat.

¹¹⁵ Garrucci, *T. cxii.* 20.

closely copies the pieces struck in the names of the Tarentines, Rubastines, and Alexander himself; but on the other side, in place of the rayed head of the Sun, we find in this case the seated Molossian eagle. There can be little remaining doubt that this same symbol occupying the field of these Tarentine didrachms points to the same connexion, and we may therefore fix the date of their issue during the years (334—331 inclusive) that intervened between Alexander's landing and his final rupture with Tarentum, which seems to have taken place shortly before his death in 330.

V. Type A.

Time of ALEXANDER THE MOLOSSIAN, 334—330 B.C.

Naked horseman lancing downwards, &c., to r., within beaded circle. On the reverse, a seated eagle.

Obv.

1. In f. to r. **AR**.
Beneath horse **ΦΙ**.
[Pl. VI. 1. A. J. E.]

Rev.

Taras, of corpulent proportions, astride, &c., to l., his farther leg outlined in front of dolphin's head. His l. hand is lightly laid on the fish's back, and holds a trident; in his r. he holds out a one-handed vase. Beneath, large curling crests of waves. In f. to r., seated eagle with folded wings.

2. Same; but **AR**
to l. (**ΦΙ** beneath
horse, as before.)
Car. cxiv. 215.

Taras as a plump child, a flower-like top-knot rising from his forehead, astride to l., laying his r. hand on dolphin's head, and holding in his l., which is raised to his side, a distaff, with spirally twisted wool. Beneath, **ΦΙ** and curling waves. In f. to l., seated eagle with folded wings.

3. Same.
A. J. E.

Taras, a plump child, as before, but of larger dimensions. In f. to l., **ΦΙΑΙΞ**; to r., seated eagle. Beneath, large curling waves.

Obv.	Rev.
4. Same. A. J. E.	Same; but child Taras not so large; eagle to l.; and Φ I and smaller waves below.
5. Same. Car. cxiv. 216. B. M. Cat. 235. [Pl. VI. 2.]	Same; but Φ I Λ Ξ in f. to l., and eagle to r. Beneath, waves as before.
6. Same; but Ξ IM beneath horse. Car. cxiii. 192. B. M. Cat. 233.	Same as No. 4.
7. Same as No. 6. Car. cxiii. 193. [Pl. VI. 3.]	Same; but eagle in f. to l.; Φ I and large curling waves below.
8. Same: but be- neath horse, Ξ I. [Pl. VI. 4.]	Same; but no waves.

The coins of this "Molossian" type are characterized by the appearance on the Tarentine dies of a peculiar and well-marked representation of Taras as a decidedly fleshy child, holding in the left hand a distaff wound round with wool. The rounded obese figure, as seen on the earliest coins of this class—in some cases even verging on caricature—fits on morphologically to the somewhat stumpy and heavy though maturer form of the Eponymic hero as he appears on some of the most characteristic types of the two preceding Periods.

The motive for the intrusion of this somewhat ungainly type into the Tarentine series was, perhaps, supplied by a certain aspect of local religious cult, on which a new light has been recently thrown by the discovery of large deposits of votive terra-cotta figures, in tombs and upon the site of temples formerly contained within the walls of

Tarentum. In the tombs have been found a class of abnormally fat childish figures, some of which, as, for instance, a winged genius crowned with ivy-leaves and berries, have a distinct Bacchic connexion. And the curious phase in Tarentine art-fashion attested by these figures seems, in fact, to have been associated with a deeply-rooted Tarentine cult of the Chthonic Dionysos, his consort Persephonê-Kora, and their mystic progeny, the infant Iacchos, the plastic representations of whom have been found by the thousand on the site of a local sanctuary.¹¹⁶ In the manifold representations of the Eponymic founder on the Tarentine coinage, it is usual to find him endowed, not only with the attributes, but also with the attitude and aspect of various divinities. Not only does he bear the trident of his father Poseidôn, but at times he brandishes it in a distinctly Poseidôn-like fashion. Not only do we see him with the tripod or the laurel spray, the arrows of the Python-slayer or the Hyacinthian flower, but at times he wears Apollo's locks and imitates his pose.¹¹⁷ The kantharos of Dionysos is of frequent occurrence, and it is found, though at a slightly later date, in the hand of the strange infantile type of Taras with which we are dealing,¹¹⁸ in which case it singularly recalls the mystic cup stretched forth by the infant Iacchos on the votive Tarentine terra-cottas. A still more unfailing accompaniment, however, of this impersonation of Taras is the distaff wound round with wool, which, again, suggests an interesting comparison with a figure of the infant Dionysos of the Mysteries as it occurs on an

¹¹⁶ *Hell. Journal*, 1886—8.

¹¹⁷ See p. 149.

¹¹⁸ Cf. VI.F 1, reading on obv. ΝΙΚΟΔΑΜΟΞ; rev. ΙΟΡ.

Apulian krater.¹¹⁹ On this vase, which, if not actually of Tarentine work, at least belongs to the Tarentine school of ceramic art, the mystic offspring of Kora is seen depicted as a plump child, and holding in his right hand what is described as a thyrsos, but which, with its spirally-twisted top, is hardly to be distinguished from the distaff on the coins. He is represented in a squatting attitude, half-raising himself on one knee, and with the other drawn up under him, while he props himself up on his left arm. Above him is inscribed the name Dionysos, and to the left appears the head of Persephonê-Kora, accompanied by the first four letters of her mystic Samothracian name Axiokersa. Both the figure on the vase and Taras in his peculiar infantile impersonation have their hair bound up into a kind of top-knot above the forehead—a feature seemingly confined to this distaff-holding type. In the case of a small Tarentine gold coin,¹²⁰ the parallel to the figure on the vase is even closer. There the infant Taras is represented in an almost identical attitude, half raising himself on one knee and with the other bent under him, and holding the distaff in his right hand. The head on the obverse of this small gold type is probably that of Persephonê.

These comparisons lead us to the conclusion that the

¹¹⁹ *Archæologische Zeitung*, 1850, Taf. xvi., described by Gerhard, p. 161, *seqq.*

¹²⁰ Pl. V. 13 (B.M.); cf. Carelli, T. cii. 8; Garrucci, *Monete dell' Italia Antica*, T. c. 63. The left arm of Taras in this representation, though held downwards, does not, as in the case of the figure on the vase, rest on the ground; nor could it, since a small dolphin below indicates the sea. In Taras's left hand is seen a circular object, perhaps a wreath, towards which the child directs his gaze. The infant Dionysos on the vase looks to the right towards the figure of his mother Axiokersa.

plump infantile representation of Taras which at this time makes its first appearance in the Tarentine dies, is to be regarded as approximating to that of the mystic child Iacchos, and marks the influence of a prevalent Chthonic cult on that of the Eponymic founder. The type was revived more than once on later periods of the Tarentine coinage, but these revivals are easily distinguished from their prototypes of the present class, which, besides their earlier fabric, are in almost all cases associated with the signature $\Phi\Lambda\Lambda\Xi$ or its abbreviations.

In Type B, Nos. 1—5 inclusive, I have collected a series of coins which both from their type and their signature $\Phi\Lambda$, $\Phi\Lambda\Lambda$, stand in immediate relation to the Molossian group. On these coins, however, the beaded border and the eagle symbol are no longer found. The child Taras too is rendered with less exaggerated corpulence, and after successive modifications is transformed into a youth of elegant proportions, the somewhat slimmer successor of the noble Ephêbos who appears on the coins signed $K\Lambda\Lambda$ at the close of the preceding Period IV. This type now again begins to predominate.

That these coins in fact belong to the period of Tarentine history that succeeded the fall of the Molossian Alexander in 330, is fully corroborated by the evidence of an interesting find of Tarentine and Campanian and other coins that I saw at Naples in 1884. The find itself was discovered in Samnium, to the west of Benevento, and for convenience I shall refer to it as the Beneventan Find. It contained besides about two hundred Campanian pieces of Neapolis, Hyrina, and Nola, some coins of Velia, and a few of Metapontion and Tarentum, and—especially valuable as an indication of date—a certain number of Romano-Campanian pieces, some of the type representing

the bearded head of Mars with the horse's head on the reverse, and others fresh from the mint bearing on their obverse the youthful head of Hercules and the wolf and twins on their reverse. A brief account of the specimens belonging to this find that I was able to secure will be found under Appendix A.

Of the Romano-Campanian coins, those with the bearded head of Mars, both from their style and the condition in which they were found in this find, are obviously the earlier. Mommsen¹²¹ is of opinion that the issue of the coins reading **ROMANO** is to be referred to the earliest period of the Roman occupation of Capua, and therefore begins shortly after the year 338 B.C. On the other hand, coins of slightly reduced weight also reading **ROMANO** began in all probability to be struck before 300. It therefore appears that the date of the deposition of the Beneventan hoard, which contained no coins of the latter class, must lie between these two years. At the same time, the comparatively used condition of the coins presenting the bearded head of Mars brings down the issue of the other type with the head of Hercules, several specimens of which occurred in this hoard, absolutely *fleur de coin*, to the latest limits of this first period of the Romano-Campanian coinages. Bearing in mind the similarity of the obverse type on this latter coin to the head of Hêraklês on some Syracusan bronze pieces struck under Agathoklês, we shall not therefore be far wrong in fixing the approximate date of 310 B.C. for the deposit of this Beneventan *tesoretto*.

The Tarentine coins found in this hoard comprised a

¹²¹ *Op. cit.*, ed. Blacas, I. p. 262. Cf. Babelon, *Monn. de la Rép. Romaine*, I. p. 10.

somewhat used specimen of Type C of Period IV., and several specimens of Type B of the present Period ¹²² in good preservation, and one or two of them in brilliant condition, thus affording additional evidence that the didrachms of this type belong to the decades which succeeded the expedition of the son of Neoptolemos. Perhaps the most remarkable feature of this hoard is the fact that although discovered in Saminium, where at a later period the "Campano-Tarentine" coins were current, no Tarentine coins of the Campanian standard were found, the coins of Neapolis and other Campanian cities being here on the contrary associated with the ordinary full weight didrachms of Tarentum. I shall have occasion to return to this important negative phenomenon.

The approximate determination of the date of the didrachm issues represented in Type A and the earlier coins of Type B, the first as belonging to the time of the Molossian Alexander's expedition, and the second as struck, for the most part, during the ensuing decades, supplies a chronological standpoint for a whole series of more or less related types, several of which form a continuation of Type B. The horseman lancing downwards is still the usual obverse type generally associated with the signature Σ A, while the prevalent scheme of Taras on the reverse is that of a somewhat slim Ephêbos astride on his dolphin—a revival of the beautiful design associated in Period IV. with the signature KAA. The earlier coins of Type B represent in fact a return by a gradual transition from the infantine type of Taras to this nobler form, which was already coming into vogue when the Benevento hoard was deposited.

¹²² V. B 2, 3, and 5.

The scheme of Taras on his dolphin as he appears on Type A 1 [Pl. VI. 1] is the natural morphological outgrowth of a common type of the two preceding Periods, in which the outer line of his farther leg is seen behind the fish's forehead. The present development of this scheme is characteristic of a small group (Types D, E, and G) of coins belonging to the present Period, and taken in connexion with the above-mentioned example (A 1), in which it is associated with the eagle symbol of the Molossian prince, must be regarded as a valuable evidence as to the approximate date of the series on which it occurs. In this scheme Taras is seen with his outer leg no longer merely outlined, but thrown slightly in front of the dolphin's snout, while his left hand is lightly poised on the fish's back behind him, holding at the same time a symbol, such as a reed, a palm-branch, or a trident, the end of which rests on his slightly drawn-back nearer ankle, thus imparting to the whole design a peculiar rhythm and equipoise. The same scheme occurs on some gold half-staters¹²³ associated with the signatures **HH** and **ΞA**, and the head of two female divinities, which, both on the grounds of signature and design, must be referred to the present Period.

Of the coins of this Period presenting this particular

¹²³ (1.) Car. ciii. 8; *B. M. Cat.* 10. *Obv.* "Head of Hêrê," wearing stephanê and necklace; behind, **E**; border of dots; *ins.* **TAPANTINΩN**. *Rev.* Taras in attitude described above, holding dolphin and trident; beneath, **HH**. (2.) *B. M. Cat.* 17. *Obv.* Same; but no letter. *Rev.* Same; but thunderbolt in f. (3.) Car. civ. 20; *B. M. Cat.* 19, 20. "Head of Aphrodite?" (perhaps the nymph Satyra) wearing earrings and necklace, the hair bound by two cords; behind neck, **ΞA**. *Rev.* Taras, as before, but wearing chlamys and receiving wreath bearing Nîkê; below, **HH** and waves.

scheme, Type D [Pl. VI. 9] is remarkable for several reasons. This coin is distinguished from all other Tarentine types of this class by the fact that both the rider on the obverse and Taras on the reverse have their right hand raised as if to greet some welcome arrival. On the obverse of this coin a naked youth on a caracolling horse is seen raising his hand above the horse's head with open palm; on the reverse Taras with his right leg thrown forward, in the attitude which characterizes this group of coins, extends his right hand, while in his left he holds a palm-branch with a fillet attached to it. In the field to the right, where on the parallel piece, Type A 1, is the seated Molossian eagle, there is here seen a crested Corinthian helmet, and below in conspicuous letters is the inscription ΞYM . The whole design of this exceptional piece seems to contain an allusion to the advent of some friendly personage.

The inscription ΞYM on the reverse does not occur on any other types of Tarentine coins or with other associations of signature, and in that respect is unique among the types of this or the succeeding Period of the Tarentine coinage. It is possible that it stands for the personal name $\Xi\text{YMMAXO}\Xi$, which is found moreover on the Hêrakteian tables. On the other hand, the exceptional character of its appearance, as well as the remarkable type with which it is associated, makes it worth while to consider at least the possibility that we have here a written expression of alliance. The absence of any Epirote symbol forbids us to refer this type to Alexander the Molossian's time. It might, on the other hand, with some plausibility be brought into relation with the part played by the Tarentines in the great coalition formed by the exiled Syracusans and their allies against Aga-

thoklēs. The Spartan Akrotatos, whose services had been enlisted for this Sicilian enterprise, landed at Tarentum in 315 B.C., and the hope of liberating Syracuse as well as the example of the mother-city, induced the citizens to join the expedition with twenty ships.¹²⁴ The gross misconduct of Akrotatos, however, frustrated the plans of the allies, and in the ensuing year (314 B.C.) the Tarentines withdrew their ships from Sicilian waters.

The landing of the Spartan prince on the Italian shore may well have had a semblance in the minds of those who invited him to the earlier landing of Timoleōn at the call of Syracuse and the Sicilian Greeks, and it is hardly necessary to recall the fact that on the occasion of Timoleōn's Sicilian expedition alliance coins were struck with the inscription $\Xi\text{YMMAXIKON}$.¹²⁵ The shortened form ΞYM , moreover, would find a precedent in the ΞYN of earlier series of coins commemorative of the Theban alliance struck by Knidos, Ephesos, Samos, and Rhodes after the battle of Knidos in 394 B.C.¹²⁶

It is probably to the date of this expedition that we must also refer the deposit of an interesting hoard of gold staters found at Taranto in 1883. The hoard consisted of ninety-two gold pieces, including eighty staters of Philip of Macedon, and five, somewhat worn, of his son Alexander, together with seven coins of Tarentum itself.¹²⁷ Of the

¹²⁴ Diodoros, lib. xix. 70. "πλευσας (δ' Ἀκρότατος) εἰς Τάραντα καὶ παρακαλέσας τὸν δῆμον συνελευθεροῦν Συρακοσίους ἔπεισε ψηφίσασθαι ναυσὶν εἴκοσι βοηθεῖν."

¹²⁵ Head, *Coinage of Syracuse*, p. 39. *B. M. Cat. Sicily*, p. 83. Cf. Gardner, *Types of Greek Coins*, p. 82.

¹²⁶ Waddington, *Mélanges Numismatiques*, Pt. ii. p. 7—19.

¹²⁷ For a summary account of this find see Professor Luigi Viola's report, *Notizie dei Scavi*, 1886, p. 279. The condition of the coins is thus described: "Di esse 7 erano stateri di

Tarentine coins, all of which were in fine preservation and *fleur de coin*, three were of the types [Pl. V. 9 and 10] representing on the obverse the veiled head of Dêmêtêr, and on the reverse the Dioskuri, and four of the type already referred to with the youthful head of Hêraklês and Taras driving a biga [Pl. V. 11]. The other coins presenting the type of the Dioskuri include two main varieties, in the one case [Pl. V. 9] with the inscription ΔΙΟΞΚΟΡΟΙ in minute letters above the riding figures; in the other case [Pl. V. 10], the twin, eight-rayed stars.¹²⁸

This type of the Dioskuri fits on in many ways to a somewhat later gold type, presenting, in place of the divine twins, a single horseman [Pl. V. 14]. The inscription ΙΟΡ, with which these later staters are sometimes associated,¹²⁹ appears as a characteristic signature on the didrachm types belonging to the latest full-weight issues—in other words, to the issues of my sixth Period, which immediately precedes Pyrrhus' expedition. The head of Dêmêtêr on the coins presenting the Dioskuri is, however, decidedly superior to the same head as it appears on these later staters, while, on the other hand, the inscription ΞΑ, which generally appears beneath the horses on these coins, is also, in the same position beneath the horse, the regular

Taranto tutti benissimo conservati, fior di conio; 80 di Filippo di Macedonia, e 5 di Alessandro suo figlio; dei Filippi nessun fior di conio, ma una metà ben conservati; gli Alessandri erano alquanto sciupati."

¹²⁸ These Tarentine gold types are of great interest from the fact that they were imitated by the Gaulish moneyers of the Amiens district (cf. Rigollot, *Revue Numismatique*, 1838, p. 218, and Pl. VIII. 1; Anatole de Barthélemy, *Rev. Num.* 1883, p. 8, and Pl. II. 1 and 2).

¹²⁹ Pl. XI. 9, De Luynes collection. Cf. Garrucci, T. c. 51.

concomitant of a whole series of didrachm types struck from Alexander the Molossian's time to the conclusion of the present Period. The signature **KON**¹³⁰ beneath the head of Dêmêtêr on these gold staters affords even more conclusive evidence that they should be referred to the present Period, for it appears with the same reversed **N** beneath Taras on his dolphin on Type E [Pl. VI. 11], exhibiting a scheme which must be regarded as one of the most characteristic of the present group. This latter type has the strongest resemblance to that already referred to, bearing the inscription **ΞΥΜ**, and both may confidently be referred to the same date.

The Tarentine staters of Macedonian types found in this hoard displaying on the obverse the head of the youthful Hêraklês and the biga on their reverse, as well as the abundance of Macedonian gold coins, may be justly regarded as directly or indirectly a result of the Molossian Alexander's expedition. On the other hand, the fact that the coins of Alexander the Great contained in this deposit were somewhat worn inclines us to bring down its date some years after that event. The absence of the Tarentine gold coins reading **ΑΓΟΑ**, which were unquestionably struck at the

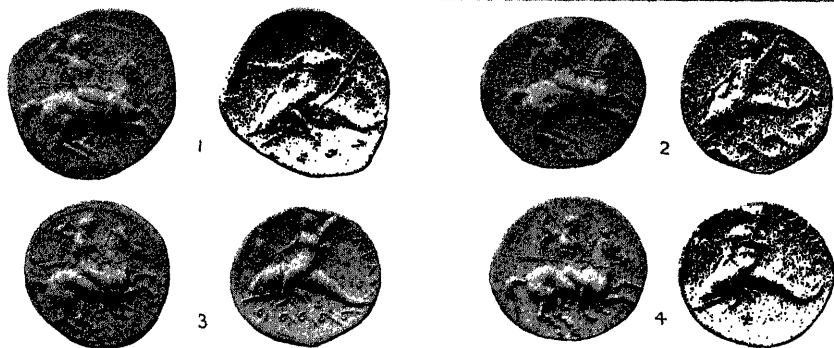
¹³⁰ This is the right reading. See Pl. V. 9 (from the Luynes collection in the Cabinet des Médailles, Paris). I have also verified the signature on a fine example of this coin in the cabinet of Signor Nervegna at Brindisi. (See too *K. Münzkabinet* (Berlin), No. 710; Millingen, *Unedited Coins of Greek Cities and Kings*, where, however, it is printed **KON**. Carelli, *I. V. N. Tav. ciii. 12.*) The readings **AKON** (*Notizie dei Scavi*, 1886, p. 180) and **AIKOM** (Garrucci, *Monete*, &c. T. c. 54) are due to the misinterpretation of the two chevron-like folds of the veil as seen behind the bust. For **AY** under the head of Dêmêtêr (*Not. dei Scavi*, loc. cit.) read **ΛΥ**. This signature **ΛΥ** is again an indication of a comparatively late date, as it occurs on some silver types of my sixth Period.

time of the Epirote Alexander's arrival, and of the still earlier gold types struck in Archidâmos' time, must also be taken as an argument for referring the withdrawal of the present hoard from circulation to a somewhat later date, which may be approximately stated as 315 B.C.¹³¹

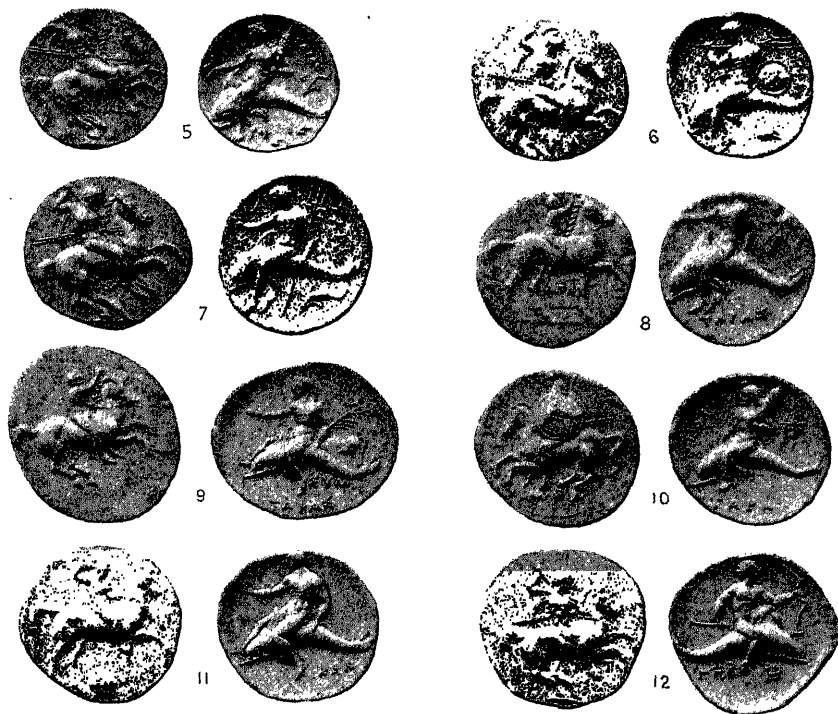
This being the case, we can have little difficulty in recognising in the beautiful type representing the Dioskuri another instance of a design commemorative of an alliance between Tarentum and its mother-city. In the earlier stater, on which Taras is seen appealing to his father Poseidôn, I have already ventured to trace a reference to the earlier appeal which found its answer in the arrival of the Spartan King Archidâmos. In the present case the appearance of the two Lacedæmonian twins on these Tarentine gold coins may be taken to convey as clear a reference to the renewed brotherhood in arms entered into with the Spartan Prince Akrotatos, the glorious scope of which was the liberation of Syracuse from the hands of the oppressor.

In Type L of the preceding Period (Pl. IV. 8) we have the earliest representation of Taras riding on his dolphin in a warlike fury and preparing to fit an arrow to his bow. It is possible that the first introduction of this warlike type, which seems in a principal degree to refer to naval enterprise, was occasioned by the arrival of the Molossian Alexander. This highly bellicose design

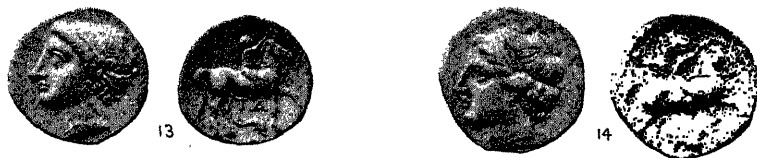
¹³¹ The absence of the later gold types exhibiting the single horseman seems to me a fatal objection to bringing down the deposit of this hoard to the last years of the fourth century or the beginning of the third, as suggested by Professor Viola (*loc. cit.*). The style of the head of Dêmêtêr, and the abundance of coins of Philip of Macedôn, some well preserved, weigh in favour of a somewhat earlier date.



Molossian Types 334-330 B.C.



Equestrian Types, Period V. 334-302 B.C.



Campano-Tarentine Types.



was, in fact, reproduced in an inferior style and with the elephant symbol below it at the time of Pyrrhus's expedition (Pl. VIII. 1, 4, 5), a circumstance which may give us a retrospective warrant for tracing a historical reference in its earlier appearances. In Type B 16 to 18 [Pl. VI. 12] of the present Period, the same design is repeated, though the workmanship of these coins lacks the minute excellence of Type L of the close of the preceding Period, and inclines to place these didrachms amongst the latest of the present class. In these instances we shall not be far wrong in connecting the appearance of this warlike type with the arrival of the Spartan Kleonymos in 302, and the successful military demonstration by which, for a while at least, the Lucanians and their allies were overawed.

V. Type B.

Horseman lancing downwards, &c., as before, sometimes helmeted. No border.

Obv.	Rev.
1. Beneath horse, ≋ A. <i>B. M. Cat.</i> 228. A. J. E.	Taras astride, &c., to r., as a child, holding in l. hand spirally wound distaff, and extending a small dolphin in his r. Beneath, ΦΙ and curling crests of waves. [TAPA ≋ in microscopic characters.] In f. to r., ivy-like leaf.
2. Same. <i>Car.</i> cxiii. 188.	Taras astride and holding distaff as before, but holding out in r. hand a small uncertain object. A flower-like tuft rises over his forehead. Beneath dol- phin, prow of vessel.
3. Same ; but horseman helmeted. Beneath horse, ΦΙΑΙ. [Pl. VI. 5. A. J. E.]	Same as No. 1.

Obv.	Rev.
4. Same (from same die as No. 3; A. J. E.) Car. cxiv. 203.	Taras, as before. In f. to l., ΦI ; to r. convolulus-like leaf. Waves below.
5. Same as Nos. 3 and 4. Beneath horse, ΔAI . Car. cx. 3.	Taras as an Ephēbos of elegant form, astride, &c., to l., holding in l. hand a shield on which is a hippocamp, and in r. a trident, which rests on his r. shoulder. In f. to l. ΦI . Beneath, a purple-shell.
6. Same. <i>B. M. Cat.</i> [Pl. VI. 6.]	Same; but in f. to l. ΦH , instead of ΦI . ¹³²
7. Same. <i>Mus. Naz. di Napoli.</i>	Same; but in f. to l. ΓH .
8. Same; but beneath horse, ΔA . . [ΔAI]. <i>Mus. Naz. di Napoli</i> , No. 1891 [ΔA "].	Same; but beneath the purple-shell, E.
9. Same; but beneath horse, ΓHPA . De Luynes Coll.	Taras as an Ephēbos, astride, &c., to l., holding on his l. arm a plain round shield and two lances, and with outstretched r. hand receiving small flying Victory, who holds forth wreath to crown him. Beneath dolphin, ΦI .
10. Same; but beneath horse, ΣA . Car. cxii. 9.	Same as No. 1.
11. Same. Car. cxiii. 189.	Taras astride, &c., to l., holding out kantharos with r. hand, and with l. resting on dolphin's back and holding trident. In f. to l. \mathcal{R} . Beneath, small dolphin.

¹³² This rare variety, a specimen of which exists in the British Museum, is in every way identical with the common type, No. 5, presenting the signature ΦI ; and the ΦH in this case must be regarded as the alternative orthographical equivalent of the first syllable of $\Phi I A I \Sigma$. . .

Obv.	Rev.
12. Same. <i>B. M. Cat.</i> 232.	Same; but in f. to l. K .
13. Same. <i>B. M. Cat.</i> 221.	Same; but in f. to l. { A K .
14. Same. <i>Mus. Naz. di Na-</i> <i>poli</i> , 1916.	Same; but $\leq \Omega$ and dot.
15. Same. <i>B. M. Cat.</i> 229. [<i>Pl. VI. 7.</i>]	Same; but in f. to l. { Ω \leq .
16. Same. <i>B. M. Cat.</i> 222.	Same; but in f. to l. { A P .
17. Same. <i>B. M. Cat.</i> 223.	Taras as an Ephēbos to r., his left foot raised so that it rests on the dolphin's forehead, extending in his l. hand a strung bow and two arrows, while in his r. he holds a third. Beneath, HP .
18. Same. <i>Car. exiii.</i> 186. [<i>Pl. VI. 12.</i>]	Same. Beneath, HP HP .
19. Same. <i>B. M. Cat.</i> 225.	Same; but beneath, HP R .
20. Same; but beneath horse, API . Above and in f. to l. and r. respectively, EPA . A. J. E.	Taras astride, &c., to l., holding oar in l. hand, and with r. extending kantharos. In f. to l. KΛ .
21. Same; I in f. to r. Beneath horse, API . <i>Car. ex.</i> 134.	Same; but KΛ in f. to l. Taras more straddling. Beneath, EPA .

Obv.	Rev.
22. Same; but A in f. to r. A. J. E.	Same; but A or Λ in f. to l. No inscription beneath dolphin.

V. Type C.

Phalanthos in crested helmet, on cantering horse to l., and covering himself with a large round shield on which is a dolphin.

1. In f. to l. A . Beneath horse, ΚΑΛ . Cf. <i>B. M. Cat.</i> 271.	Taras, of infantine Dionysiac type, astride, &c., to l., holding distaff in l. hand and his r. resting on dolphin's head. In f. to l. ΕΟΙ . In f. to r. trident.
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2. Above, Ι . In f. to r. Λ ; in f. to l. Λ . Beneath horse, ΑΠΗ . Berlin Cabinet. [Pl. VI. 10. Cabinet des Médailles.]	Same.
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V. Type D.

Naked boy on prancing horse to r., holding up his l. hand with open palm, as if in the act of salutation.

1. Beneath horse, ΞΑ . Car. cxiii. 190. [Pl. VI. 9.]	Taras as a youth of somewhat corpulent build, astride, &c., to l., further leg thrown forward, extending his r. hand with open palm, and holding in his l. a palm-branch, which rests on his heel. From the palm hangs a fillet or lemniskos, and in the field below is a Corinthian helmet. Beneath, ΞΥΜ .
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V. Type E.

Naked boy, crowning himself on stationary horse, which raises its nearer fore-leg.

1. Beneath horse, ΞΑ , and capital of Ionic column. Car. cxiii. 185. [Pl. VI. 11.]	Taras as a youth of corpulent build, astride, &c., to l., his further leg thrown forward (as D), and holding out in his r. a water-snake. Beneath, ΚΟΙΛ .
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V. Type F.

Naked boy crowning stationary horse to r. (as E).

<p>Obv. 1. Beneath horse, ΑΡΗ.¹³³ <i>B. M. Cat.</i> 140. [Pl. VI. 8.]</p>	<p>Rev. Taras astride, &c., to l., holding trident in l. hand, and with r. extending kantharos; in f. to r. Φ.</p>
<p>2. Same; but beneath horse, owl flying. Santangelo Coll.</p>	<p>Taras astride to l. holding out one-handed cup. Beneath dolphin, Ψ.</p>

V. Type G.

Naked youth on cantering horse, holding out a whip behind him.

<p>1. No letter visible. Santangelo Coll. A. J. E.</p>	<p>Taras, of somewhat heavy build, with disproportionately small head, astride, &c., to l., his further leg thrust out in front of the fish's forehead. In f. to r. caduceus: beneath dolphin, Ψ.</p>
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ARTISTS', ENGRAVERS' AND MAGISTRATES' SIGNATURES.

In considering the coins of this Period we are once more brought face to face with the question: How far the signatures on these Tarentine coins represent the names of the actual engravers of the dies?

In treating of some of the earlier Tarentine coins I have

¹³³ This signature (cf. C 2) recurs on the fine Metapontine tetradrachms struck about this period.

already partly answered this question by anticipation. The occurrence on a didrachm of Period III. of two raised rectangular tablets containing the initial letters $\leq \Omega K$, has supplied us with an example of an artist's signature of the most typical kind on a Tarentine coin. In Periods II. and III. attention has been called to a series of coins of great artistic excellence and displaying certain common features both of style and composition, all of which are marked by the signature Λ or $\Xi \Lambda$, and which taken together, afford strong presumption that we have here to deal with an engraver of no ordinary power. In Periods III. and IV. again we find the same evidence of common handiwork in the beautiful group of coins signed K and $K \Lambda \Lambda$, sometimes in microscopic characters, and in those signed A and $A \Pi$. In Types H 1 and L 1 of Period IV. we find, moreover, one or both these signatures associated with that of another artist who signs ΦI , in the last instance in microscopic characters.

It is with the signature ΦI , which, as we have seen, appears in association with two other well-authenticated engravers' signatures on some of the finest types of the Archidamian epoch, that we are at present more specially concerned, from its recurrence, at times in a more amplified form, throughout one of the most characteristic groups of coins belonging to the Period before us. A comparative study of the coins included in Types A and B 1—5, enables us in fact to arrive at the important conclusion that on one or both sides we have here too to do with the handiwork of the same engraver who signs himself ΦI , $\Phi I \Lambda I$, or $\Phi I \Lambda I \leq$.

It is to this engraver that the first appearance on the Tarentine series of the peculiar and infantine version of Taras must be ascribed; but it becomes evident that he

was by no means tied down to this representation, the introduction of which was due to considerations religious rather than artistic. We find, in fact, a perfect chain of transitional types, all with the same signature, and marked with the same minute character of engraving by which the fat earlier type of the child Taras is metamorphosed under our eyes into an Ephēbos of slender and elegant build, such as he figures on a whole series of coins belonging to the succeeding classes. On the other hand, we find ΦΙ (in association with ΚΑΑ on the obverse) executing the noble design already referred to, and in which I have ventured to trace an allusion to the fall of Archidāmos, where Taras is seen holding a heroic helmet between two stars, while in Pl. IV. 8, as already observed,¹³⁴ this signature reappears in the same association, attached to a coin which amongst all the Tarentine pieces is characterized by the microscopic minuteness of its engraving.

The technique of these coins as seen in their various developments points to some interesting conclusions. We have here all the characteristics of an engraver who, having accustomed himself to working on hard materials, has afterwards taken to one of a less intractable nature. In other words, we have here, as in the well-known instance of Phrygillos,¹³⁵ the case of a gem engraver who has been employed as a die-sinker. Two of the natural

¹³⁴ See p. 100.

¹³⁵ Those who have consistently held to the opinion, first expressed by Raoul Rochette, that the gem with the figure of Eros, signed Phrygillos, belongs to the same date as the Syracusan coins with the same signature, and that it must in all probability be referred to the same engraver, will find new support as against Von Sallet and others in Furtwängler's recently published dissertation on signed gems (*Jahrbuch d. k. deutschen Arch. Inst.* 1888, p. 197).

consequences of such a change in material are visible on several coins of the above group, one artistic and one mechanical. We are struck, very notably on Type B 3, 4 (Pl. VI. 5), by an exaggerated depth in the line engraving which in spite of the great minuteness of detail affects the design with a certain harshness. It further appears as if this over-incision of the engraving gave the metal a tendency to stick to the die and somewhat blur the impression. This over-incision and its consequences are well illustrated by the reverse of some of the Syracusan tetradrachms signed **EYO**¹³⁶; but a still more remarkable parallel is supplied by the Naxian didrachms of the engraver Proklês. In other respects the work of this Tarentine die-sinker Philis . . . suggests a hand accustomed to intaglio on gems. The engraving itself is often of microscopic minuteness, and we are occasionally struck by a certain preposterous perverseness in the exercise of this Lilliputian faculty, the personal signature being writ large, while that of the Tarentine City shrinks to almost invisible dimensions. It looks like the satisfaction taken by an artist who, accustomed himself to sign in full though as inconspicuously as possible, found the expression of his skill in minute lettering hampered by the contemporary custom of the Tarentine mint, which obliged him to attach to his handiwork an abbreviated but manifest signature, as an official rather than an æsthetic guarantee. Nor could he, as in the case of Philistiôn on the Velian coins, gratify his taste by combining his full signature with the design on one side and signing large with the first letters of his name on the reverse. The character

¹³⁶ Cf. the coins with the signature in Rudolf Weil, *Die Künstlerinschriften der Sicilischen Münzen*, T. 1, Nos. 6 and 8.

of the Tarentine types, the entire absence of such facilities as that supplied by the helmeted head on the Velian pieces, or even of an exergual line capable, as at Thurioi, of being used as a label, precluded all such expedients. As it is, many of the signatures of Philis . . . on this Tarentine series, in spite of the variations mentioned above, are abnormally minute, and notably so on the remarkable type (Pl. IV. 8) mentioned above, which is of truly gem-like execution.

It will be seen, however, from a survey of the above types, that it is not only the microscopic character of many of the works with these signatures that reveals a skilled engraver. Amongst their number are to be found types which for composition and design rank amongst the most admirable productions of the Tarentine mint, and abundantly show that we have here to deal with an artist of no mean power. The archer type of Taras (Pl. IV. 8) on the last piece transcends alike in spirit and harmonious proportions all other representations of this warlike class. The noble figure of Taras contemplating the heroic helmet between the two rayed stars that stand for the twin patrons of Tarentum and its mother-city (Pl. IV. 10, 11), has already been referred to as one of the finest of the Tarentine silver types; while for naturalistic beauty of design B 5 and 6 of the above list, showing Taras, trident on shoulder, with the hippocamp shield, and, beneath his dolphin steed, the spiral buccinum shell, are certainly unrivalled in this long series (Pl. VI. 6).

In this case again the interesting question arises: Was the activity of this artistic die-sinker, who signs ΦI , $\Phi\text{I}\Delta\text{I}$ and $\Phi\text{I}\Delta\text{I}\Sigma$ on these Tarentine coins, confined to this city? Judging by the analogy of signatures that occur on other more or less contemporary Tarentine types—at times even

in conjunction with that of Philis. . .—there is every probability that it was not. The signatures **ΚΑΛ**, **ΑΡΙ**, **ΔΑΙ**, **ΞΙΜ**, **ΑΡΗ**, **ΙΗ**, and others, the four first of which are found on the Tarentine coins in conjunction with **ΦΙ**, reappear among the very limited number of signatures found about the same date on the coins of Hêrakleia, Metapontion and Thurioi. The signature **ΦΙ** itself occurs on coins of the two former of these cities, and though in these cases it may, occasionally at least, be an abbreviation for the name of another artist who also signs **ΦΙΛΟ** or **ΦΙΛΩ**, there are, as we have seen, strong *a priori* grounds for suspecting the collaboration of Philis . . . When on a small Terinæan piece of late fabric¹³⁷ we find the inscription **ΦΙΑΙΞΤΙ** (**ΦΙΑΙΞΙΙ**), we seem to be led a step farther towards the completion of our artist's name; the more so if, as seems by no means improbable, this coin may be referred to the brief period of restored independence which from about 334 B.C. onwards Terina owed to the intervention of the Molossian Alexander. A remarkable

¹³⁷ Garrucci, cxvii. 17; Carelli, clxxx. 17, 18. The lateness of these coins is shown by the resemblance, if Garrucci's representations can be trusted, of the head and coiffure on the obverse to that of other small Terinæan silver pieces, as well as some of bronze, bearing upon them the Brettian crab, and therefore later than the date of the Brettian conquest of 356. Mr. R. S. Poole, indeed, *Nun. Chron.* 1883, 273, *Athenian Coin Engravers in Italy*, brings a small coin of the same class reading **ΦΙΑΙΞ**, into possible connexion with the signature **Φ**, on a fine series of Terinæan, Pandosian, Hêrakleian, Thurian, and Velian coins, which he inclines tentatively to refer to an earlier Philistiôn, the grandfather of the later Velian engraver, in accordance with the Greek fashion of giving a name in alternate generations. The figure, however, on the cippus on these coins reading **ΦΙΑΙΞΙΙ**, shows certain points of resemblance to the Eirênê on the Locrian didrachms, struck, according to Mr. Head (*Historia Numorum*, p. 86), circ. B.C. 344—332.

didrachm,¹³⁸ presenting on one side Taras on his dolphin preparing to discharge an arrow from his bow—a design allied to that which first appears on the Tarentine dies with the signature $\Phi\iota$ —and on the other side the Terinaean Nikê holding a wreath, must in all probability be brought into relation with this historic episode, and brings Tarentum into a special connexion with Terina. And in view of this chain of evidence, it is impossible to avoid the suggestion that the full name of our Philis . . . is to be read $\Phi\iota\lambda\iota\varsigma$ - $\tau\iota\omega\nu$, and that he is in fact one and the same with the engraver who has left his signature in full on some of the coins of Velia. On the grounds of style alone, especially in the case of an artist whose activity covers a considerable period of years, and who, in harmony with the influences of his time, has passed through more than one "manner," it is difficult indeed in such minute work as die-sinking to establish satisfactory criteria. Even in the case of the great Syracusan engravers of a better age, the most careful critic must be often at a loss in the endeavour to lay down definite canons of distinction. With regard to date, however, no valid reason can be urged against the proposed identification, and in the present case a careful analysis of the types themselves will be found to supply some valuable indications of common handiwork in other designs with these signatures which make their appearance at Velia and Tarentum.

The period of years during which Philis . . . seems to have worked for the Tarentine coinage, from shortly before the date of the Molossian Alexander's expedition onwards, certainly squares very well with the approximate

¹³⁸ *Berliner Blätter*, III. p. 9, and T. xxix. 3.

date of the Velian coins bearing Philistiôn's signature. More than this, there are certain features on the Velian works of Philistiôn which unmistakably betray a close familiarity with designs in vogue in three at least of the cities of the Ionian shore—Hêrakleia, Metapontion, and Tarentum itself—already referred to as used to employ the same engravers. Thus we find this engraver for the first time introducing on the Velian series a Corinthian form of helmet, which about the same date makes its first appearance on the coins of Hêrakleia and Metapontion, where during the last quarter of the fourth century B.C. it becomes quite usual. At Velia, on the other hand, this deviation from the usual Athenian type of Pallas' head-piece is confined to Philistiôn's work, which combines in a remarkable way motives supplied by the contemporary coinage of Hêrakleia and Metapontion. So far as the general outline of the head and helmet is concerned, the crest and the arrangement of the hair, Philistiôn's Velian Pallas is almost a reproduction of the contemporary didrachm type of Hêrakleia. In the ornamental design, however, with which the upper part of the helmet is decorated, the quadriga, with horses at full gallop, we see a close adaptation of the same device in the same position as it appears on the helmet of Leukippos on the fine tetradrachms of Metapontion.¹³⁹

But the parallel goes a step farther. The peculiar method adopted by Philistiôn for attaching his signature

¹³⁹ On some of the didrachms of Metapontion, with the head of Leukippos, the signature ΦΙ appears associated with the triquetra symbol. The same symbol appears on coins of Velia dividing the same letters, in this case in all probability the signature of Philistiôn.

to the helmet on the Velian coins, the utilization, namely, for this purpose of the curved line at the base of the crest, is borrowed from the practice of the artist Aristoxenos (*ex hypothesi* the master or associate of the artist ΦΙ . . . on Tarentine coins),¹⁴⁰ who on the fine didrachms of Hêracleia¹⁴¹ of a slightly earlier date, first invented this device. Amongst all Greek coin engravers this mode of signature is confined to Aristoxenos and Philistiôn.

More than this, in the noblest of all Philistiôn's Velian types, that, namely, upon which the wounded lion is depicted seizing in its jaws the lethal shaft, the artist has introduced between the first two letters of his name, wherewith on this side of the coin he contents himself, a figure of the two Dioscuri, which is no less suggestive of Tarentine types. In other instances there appears on the the neck pieces of the helmet, signed in this case ΦΙΛΙΣΤΙΩΝ, a rider on a stationary horse which lifts up one of its forelegs, a design literally reproduced from some contemporary Tarentine coins.

These are minute coincidences, but taken together they afford a substantial link of evidence, the more so when it is remembered that each and all of these features are absolutely confined on the Velian series to Philistiôn's handiwork. Comparing in a less general fashion the work of the Velian engraver with that of the Tarentine Philis . . . we distinguish in them both a certain fondness for naturalistic representations, which amongst the contemporary engravers of the respective cities seems peculiar to these two. The elegantly finished ivy-leaf (Pl. VI. 5), of which every vein is delicately indicated, and the pretty twisted shell (Pl. VI. 6) introduced

¹⁴⁰ See p. 54, &c.

¹⁴¹ Garrucci, Tav. ci. 34.

in another work of the Tarentine artist, beneath the dolphin, find their appropriate parallels in the lifelike figure of the locust or the graceful vine-spray ¹⁴² with which Philistiôn at times divides his signature. Both engravers, considering the general practice of the age in which they work, show a remarkable tendency to adhere to the more archaic practice of surrounding the type with a beaded circle. One still more suggestive point of resemblance remains to be pointed out. Upon the Tarentine series there are several types in which the curling crests of the sea waves are introduced beneath the figure of Taras on his dolphin. This device, though on the series as a whole of only occasional occurrence, becomes an almost universal characteristic of the group of coins signed $\Phi\Lambda\Lambda\Xi$, $\Phi\Lambda\Lambda$, and $\Phi\Lambda$. On the types of the other Greek cities at this time existing in Southern Italy, it is altogether absent, till on the Velian coinage this purely Tarentine feature is suddenly introduced by Philistiôn, and that, as far as can be seen, without any inherent appropriateness and simply from the force of decorative habit, beneath the figure of his wounded lion.

On several of the Tarentine coins of the present group, which I would tentatively attribute to the same Philistiôn who worked for the Velian mint, we find his signature associated on the other side with that of an artist who signs ΞA . This signature is for the most part confined to Class V., but it also is found on some types belonging to the succeeding class. In all cases, however, it is

¹⁴² Perhaps a reminiscence of the exquisite vine-spray associated on a Velian coin of earlier date with the signature Φ , according to Mr. Poole's felicitous suggestion (*loc. cit.*), the work of an earlier Philistiôn.

associated with equestrian types.¹⁴³ This artist, it will be seen, specialized in the portrayal of horses, and some of the noblest steeds in the Tarentine series are of his workmanship. The same specialization is observable on the work of another contemporary engraver who signs himself $\xi IM.$, and it is noteworthy that, as at Tarentum, this signature is exclusively associated with the horse type, so at Thurioi, where it reappears, it is only found in connexion with the reverse design of the butting bull. The powers of Philistiôn, if we may venture so to complete his name, were of wider range, for his signature is associated with some of the most spirited representations of the lancer on his prancing steed, as well as with the most varied types of Taras on his dolphin.

It would appear, from what has been already said, that during the Period with which we are concerned and those that precede it, the signatures on the Tarentine coins, with the possible exception of the gold coins signed $KYAIK$ and $ΑΓΟΛ$,¹⁴⁴ are those of the actual die-sinkers rather than of civic magistrates. Either we have well-marked groups which, on the ground of internal evidence alone, we are justified in referring to the same engraver, or we find the same signatures recurring on coins of the same period belonging to other Magna-Græcian cities—as, for instance, KAA , ΔAI , ξIM , &c. In the succeeding Period (VI.), which, as we shall see, embraces the last of the full-weight didrachm series, a remarkable change takes place. For the first time full-

¹⁴³ On the gold coinage the signature of ξA is associated with the beautiful type representing the Dioskuri. It is also found with the head of a nymph (Carelli, civ. 4), an exception to his usual practice.

¹⁴⁴ See p. 66, *note*.

length signatures appear which have no relation to the workmanship of the coins, and which there is every reason to refer to civic magistrates of Tarentum. And when these appear they naturally take the post of honour beneath the principal type, thrusting aside the signature of the actual engraver of the coin into a secondary position in the field. This process is well illustrated by the case of the artist Ξ A , who prolonged his activity through the early part of the period of full-length signatures. This engraver still continues to associate his name, as before, with purely equestrian types, but instead of signing, according to his wont, beneath the body of the horse, he now resigns this front place to succeeding magistrates, and contents himself with a position in the field above. The same revolution is well illustrated by the case of another engraver who first begins to work on the Tarentine dies shortly before the reduction of the standard. This engraver, who signs **EY** (often retrograde), and whose productions, owing to their exaggerated relief, stand out so clearly amongst contemporary types, that it is possible to pick them out without first searching for the authentication of the signature, invariably follows the same rule as Ξ A , placing the first letters of his name in the field and leaving the space below the horse for the full name of the magistrate.

It is true that the conspicuous lettering of these signatures clashes with the received ideas as to the custom amongst the best engravers of ancient dies. Even Raoul Rochette, who, following out the argument derived from the appearance of the same signatures on coins of different Magna-Græcian cities, was inclined to admit the claims of a wider class of engravers, was afterwards prevailed upon to draw back from some of the logical consequences of

his own method.¹⁴⁵ Undoubtedly amongst the monetary artists of the best period the highly refined device prevailed of inscribing the name in almost microscopic letters, and of hiding away the signature in some part of the design, — beneath the neck, in a fold of the sphendonê, on a plate of the helmet, or even the exergual line. But even in the case of cities where, from the largeness or the general character of the design this plan was feasible, it was by no means invariably followed. At Syracuse itself the signatures of Eumenos, of the engraver who signs **EYΘ**, of Phrygillos, of Evænetos, are often conspicuous enough. What was comparatively easy of achievement on the noble pentekontalitra, or even on tetradrachms, was not so feasible on coins of lesser module. At Thurioi, where on some of the tetradrachms, and in imitation, it would seem, of Syracusan practice, **ΙΞΤΟΡΟΞ** signs on the exergual line beneath the bull, in letters which vie in minuteness with the analogous signatures of Kimôn or Evænetos, it was found advisable in the case of the didrachms to follow a less ambitious plan. Either the exergual line was widened into a regular base, on which, for example, the legend **ΜΟΛΟΞΞ** — **ΞΟΞ**¹⁴⁶ is often visible enough, or when the exergual

¹⁴⁵ Compare his *Lettre à M. le duc de Luynes sur les Graveurs des Monnaies Grecques* (Paris, 1831), which certainly contains some rash assertions, with his more cautious *Lettre à M. Schorn, Supplément au Catalogue des Artistes de l'Antiquité grecque et romaine* (Paris, 1845).

¹⁴⁶ The Thurian didrachms signed **ΜΟΛΟΞΞΞΟΞ**, belong to two distinct types. In the first of these, characterized by a large head of Pallas on the obverse, the signature is much finer; in the other case it is at least a third in diameter larger and associated in the obverse with an exceptionally small head of the goddess.

line was left we find the name sprawling across it in a most ungraceful fashion, as in the signature **AMΦ . .**, supplied by a hoard of coins recently found near Oria. Yet the very failure of these attempts to follow the practice of the masters of the art has a special value as showing that the signatures of both **ΙΣΤΟΠΟΞ**, and **AMΦ . . .** belong to the same general category, and cannot be separated by any definite line of demarcation. The Thurian pieces, indeed, enable us to carry the chain of connexion a step farther. To avoid the sprawling effect of such signatures as the last it only remained to complete the transition already partially effected in the last instance, and to transfer the name to the interspace between the bull's legs immediately above the exergual line, as is done in the case of **ΛΙΒΥΞ**, **ΦΡΥ**, **ΕΥΘΥ**, and other signatures.

In the case of Velia, again, though Philistiôn on the obverse of his coins follows the classical practice of inserting his signature at full length and in small letters beneath the crest of Pallas's helmet, it is impossible to doubt that the abbreviated but conspicuous signature **ΦΙ** found in the field on the reverse of the same pieces, and associated with a design of far greater merit than the head on the obverse side, is that of the same engraver.¹⁴⁷ The same remark holds good of the engraver **ΑΡΙΞΤΟΞΕΝΟΞ** at Hêrakleia. In some cases he signs in minute letters both on the exergual line of the reverse and on the Pallas' helmet of the obverse. In other cases, on the other hand, while still continuing the miniature signature on the

¹⁴⁷ This is further shown by the parallel instance of the other known Velian engraver Kleudôros, who signs his name in full on the helmet on the obverse, and repeats the first two letters of his signature in monogram on the reverse.

reverse, he contents himself with a large **A** beside the helmet on the other side.¹⁴⁸ On one of his Metapontine pieces he combines both systems, signing with a large capital **A** in the field, beneath which, in small characters, are contained the second two syllables of his name. The Hêracleian artist, again, who signs **EYΦΡ** in minute letters on the exergual line, varies the practice by placing a conspicuous **EY** in the field above it between the legs of the struggling Hêraklês. We see from these and other examples that in the Italian parts of Magna-Græcia as well as in Sicily, the same engraver follows both practices, sometimes, too, on the same coin.

But on the silver pieces of Tarentum, with which we are more specially concerned, there was little opportunity for the exercise of the artistic refinement of interweaving the signature with the design. In one instance, indeed, a didrachm of larger module and of the earlier kind, exhibiting the seated Dêmos of Tarentum, a small **E** is seen on the back of the dolphin on the reverse,¹⁴⁹ which, judging by contemporary analogies,¹⁵⁰ we have every right to refer to the name of the engraver. On a

¹⁴⁸ On the coin with the name of Aristoxenos on the base of the crest of the helmet, **A** also appears in the field in the same position; it looks as if, in this case, Aristoxenos had attached his signature in two capacities:—as an artist and as a responsible mint official.

¹⁴⁹ Von Sallet, *Die Künstlerinschriften auf Griechischen Münzen*, p. 15, 43. Even Von Sallet inclines to regard this as the initial of an artist's name. Otherwise he pronounces against all Tarentine claims to artists' signatures. "Auf allen anderen Münzen von Tarent finden sich keine irgendwie sicheren Künstlernamen."

¹⁵⁰ Cf. the **EYAI** on the small dolphin in front of the nymph's head, on a tetradrachm by Evænetos, and the more conspicuous **KIMΩN** on the dolphin of a decadrachm.

later didrachm, also, an H appears in the same position.¹⁵¹ But these are altogether exceptional instances, and it must be acknowledged that as an artistic device the expedient in this case was not felicitous. The facilities for "hide and seek" offered by the didrachm types of neighbouring cities, such as the convenient section of the neck afforded by the heads on Metapontian coins, or the vacant plates on Athena's helmet at Hérakleia or Thurioi, were altogether wanting in the Tarentine coins with which we are dealing. Even an exergual line was not usually to be found on the Tarentine didrachms. Frankness was thus inevitable.

There is, moreover, another side of the question which does not seem to have been sufficiently considered by those who have approached the subject from the standpoint of pure art criticism. It seems sometimes to be assumed that the actual engravers only signed in their artistic capacity. Modern specializations of calling which separate the die-sinker's art-work from that of those who actually strike the coins, and both again perhaps from that of the responsible mint official, must not be allowed to pervert our judgment. The whole character of the signatures on these Tarentine pieces shows that the engravers signed as those responsible for the weight and metal as well as the execution of the individual piece that bore their mark. This is in perfect keeping with mediæval analogies, and fits in with what we know of the system in vogue at Antioch in Antiochos Epiphanês' day,¹⁵² and

¹⁵¹ *Zeitschrift für Numismatik*, II. 1. Owing to the kindness of Dr. Imhoof-Blumer I am enabled to represent an example of this coin on Pl. III. 1.

¹⁵² The story of King Antiochus, going about the city as a private person and visiting the workshops of the moneyers.

apparently in other Asiatic Greek cities where the coinage was in the hands of private individuals, who, like Dēmētrios the Ephesian, seem to have united the callings of moneyer and silversmith or jeweller. The appearance of more than one die-sinker's name on the same coin is easily accounted for by the existence of *Συνεργασίαι* or companies of moneyers and gold or silversmiths, of which we have epigraphic evidence,¹⁵³ or even of smaller partnerships in business. The appearance of more than one signature on the same side of a coin may occasionally afford an illustration of a practice not unknown in the allied craft of gem-engraving, and of which an instance may be cited in the celebrated cameos inscribed **ΑΛΦΗΘΟΣ CYN**
ΑΡΕΘΩΝΙ where **ΕΓΟΙΟΥΝ** is obviously understood.¹⁵⁴ Such a collaboration, so familiar in the greater works of ancient art, enabled either artist to contribute his special faculties towards the production of a composition. On the whole, however, it is safer to suppose that in most cases the presence of more than one signature on the same die indicates the joint responsibility of several *maestri* working in the same *bottega*. It is further to be observed that in these cases one of the signatures occurs at greater length than the others—an indication that this more

(ἀργυροκοπεῖα) and goldsmiths is given by Athenæos (Lib. 10) on the authority of the 26th book of Polybios: "Μάλιστα δὲ πρὸς τοῖς ἀργυροκοπέοις εὐρίσκετο καὶ χρυσοχοῖς, εὐρεσιλογῶν καὶ φιλοτεχνῶν πρὸς τοὺς τορευτὰς καὶ τοὺς ἄλλους τεχνίτας." The conjunction here with the *Toreuta* is significant.

¹⁵³ C. I. G. 3154. (Cf. Lenormant, *La Monnaie dans l'Antiquité*, iii. 251). **ΣΥΝΕΡΓΑΣΙΑ ΤΩΝ ΑΡΓΥΡΟΚΟΡΩΝ ΚΑΙ ΧΡΥΣΟΧΟΩΝ.**

¹⁵⁴ See Raoul Rochette, *Lettre à M. Schorn: Supplément du Catalogue des Artistes de l'Antiquité grecque et romaine* (Paris, 1845), p. 113, as against Koehler's view, that the inscription refers to a joint dedication of the work.

emphatic signature belongs to the actual engraver of the die. Thus we find the artists who sign **ΚΑΛ**, **ΦΙ**, and **ΑΠΙ** grouped together in a series of coins of Period IV., all presumably from the same *atelier*, but on coins where **ΦΙ** occupies the principal place on a die we find signatures of the others in the abbreviated forms of **Κ** or **Ρ**. This practice must be distinguished from that of the later Tarentine coinages, where, as I hope to show, the principal, and generally full-length signature, is that of a magistrate, and has no visible relation to the style of the engraving.

The private character of the moneyers' industry explains how it is that the same signatures appear on the coins of different cities, it being natural that an *Ἀργυροκόπος* who had earned a reputation as a good engraver, should at times obtain employment even from remote quarters. But where a system of this kind prevailed and the coinage of the State, instead of issuing as at Athens from a central mint, was entrusted to private enterprise, it became the more necessary that the individual pieces should receive the guarantee of the moneyer or firm of moneyers, who had made themselves responsible for their sterling weight and standard, as well as their artistic excellence. A coiner, who was also his own die-sinker, signed in both qualities. It was open to him in some cases, if he was a great artist, to lay stress on that side of his character and sign upon a coin as he might upon a gem. But local custom, or the accident of the type he had to deal with, was not always favourable to the adoption of such a practice. In cities where private moneyers supplied the public needs, it may well have been required by law that the signature that authenticated the coin and fixed the responsibility of the individual should

be made clearly manifest. So at Velia we find both Philistiôn and Kleudôros, although on one side of the coin they follow the purely artistic tradition, signing conspicuously enough on the other side with the first letters of their names, and in a style which recalls the contemporary Tarentine practice. At Tarentum itself, whether owing to special regulations on the part of the State or to natural causes inherent in the type, this seems to have been the only form of signature current, if we except some microscopic signatures of **KAA** and **ΦΙ**. It is a form which emphasizes the official responsibility of the moneyer in all his capacities. But it covers his artistic qualifications; it does not exclude the possibility of his having achieved fame in other fields as an engraver, and where we find, as in the case of Kal . . . of Ari . . . or of Phi . . . a signature associated with excellent work, we have as much right to place him in the rank of artistic engravers as if he had hidden his name in some part of the design.

No one doubts that the small and concealed signatures of an earlier period, such as those represented by the great Sicilian works of the close of the fifth and beginning of the fourth century, have a purely artistic value. They belong to a time when, whether owing to the monetary system then in vogue or to other causes, it was not thought necessary for moneyers as such to attach their sign manual. When we find a signature of this kind we have a right to exclaim, "It is an engraver's signature, and therefore an artist's." But, as we see from the Tarentine series, a practice grew up during the fourth century of engravers initialling every single piece. At times, as in the case of the Velian coins referred to, they continue or revive the older practice of interweaving their name full-length, or in an abbreviated form,

with some part of the design. But even in such a case as this they usually repeat their signature in its more official form on the other side of the same coin. At times, as at Thurioi, we are able to trace a regular transition from signatures of the old artistic character to the regulation stamp. But to seize on this difference of type as a proof that the later signatures are not those of the engravers of the dies is to mistake the point at issue. The truth is, that during the later period with which we are specially concerned, it is not the lack of engravers' signatures that should cause perplexity, but their abundance. There are some who, from the noble style of their designs, the gem-like finish of their work, and the fact that they were employed by different cities, evidently enjoyed an artistic reputation in their own day although they may not have signed in the older artistic fashion. There are others, such as the die-sinker who signs **EY** at Tarentum, who, by the evidence of their own work, have no claim to rank as artists. But to take the last-named example as a crucial test, the very grossness of the features that characterize the coins signed **EY** proclaims identity of handiwork. The magistrates' names that occur beneath the horses on this group of coins continually vary, but the signature in the field and the style of engraving go hand in hand; they come in and they depart together. It is an engraver's signature, but not an artist's.

PERIOD VI.—FROM KLEONYMOS TO PYRRHUS.

302—281 B.C.

In the coinage of Period VI. I have included all the full-weight didrachms that exhibit signatures at full

length, together with one or two other types which, from their close connexion with the others or their approximation to some of the earlier issues of reduced standard, must be regarded as belonging to the present class. It must, however, be borne in mind that though considerations of convenience have led me to group together the coins with the full-length signatures in the present class, it is probable that a few of these, such as Type B, for instance, come chronologically within the limits of the preceding Period. The present Period extends to the time when the weight of the Tarentine didrachm which, from the date of the first coinage of this city, had been maintained at about 123—120 grains, was reduced to about 100 grains. Of the date and circumstances of this reduction of the standard in which other Magna-Græcian cities participated, there will be occasion to say more in treating of the first coinage of the didrachms of lighter weight. Here it may be sufficient to mention that there are cogent reasons for connecting the reduction of the Tarentine silver standard with the coming of Pyrrhus. Assuming then that the issues of the preceding Period V. reach down to the approximate date of 302 B.C., we have left for the duration of the present class a space of somewhat over twenty years.

It is a remarkable, and at first sight, enigmatic fact, that while, as I hope to show, the reduction of the didrachm weight did not take place till the time of Pyrrhus, a class of drachms makes its appearance during the present Period, the standard of which corresponds to that of the reduced didrachms. These are the pieces presenting on one side the helmeted head of Pallas, and on the other the owl on the spray, and the average weight of which is rather

under than over 50 grains.¹⁵⁵ That the early drachms of this type belong, in fact, to the present Period appears not only from their style, but from the inscription **ΙΟΡ** which they universally bear, and which is peculiar to the didrachms of Period VI. These early drachms present the following principal varieties:—

Obv.	Rev.
1. Head of Pallas to l., in crested helmet, on which is Scylla hurling a rock.	Owl with closed wings to l., seated on olive spray. In f. to l. TAP to r.
	<div style="display: inline-block; vertical-align: middle;"> $\begin{array}{c} \text{P} \\ \text{O} \\ \text{H} \end{array}$ </div> <div style="display: inline-block; vertical-align: middle; margin: 0 10px;">or</div> <div style="display: inline-block; vertical-align: middle;"> $\begin{array}{c} \text{H} \\ \text{O} \\ \text{V} \end{array}$ </div>
2. Same.	Same, but club in f. to r. and insc. ΙΟΡ .

A still more cogent proof of priority in date of these drachms to the others of the same class, the inscriptions on which correspond with those of didrachms of the reduced weight, may be drawn from the evidence of a recent Calabrian find, the analysis of which will be found under Appendix B. In this find, which included all the earliest didrachm issues of the reduced weight, the drachms found belonged exclusively to the later class presenting magistrates' names of the Pyrrhic epoch. The negative evidence supplied by the Calabrian find receives, moreover, a strong corroboration from the contents of another hoard of Tarentine and other Magna-Græcian coins found between Oria and Manduria in 1884. Some two hundred coins belonging to this hoard, which, for convenience, may be referred to as the Oria find, passed through my hands, and, although owing to the fact that they had unfortunately been partly mixed with

¹⁵⁵ There is a solitary instance (Carelli, *Descr.*, No. 405) of a coin of this type weighing as much as 56 grs. (3·64 grammes).

other specimens I have in this case avoided attempting a detailed analysis of the deposit, it has yet been possible to draw some broad conclusions from its composition. The Tarentine didrachms belonged, for the most part, to the present and the preceding Period ¹⁵⁶; they were all of full weight, and there is every reason to suppose that the hoard was deposited between 300 and 281 B.C. Numerous specimens of Types E, F, and G of the present Period occurred *fleur de coin*, and with them, some in equally fresh condition, were associated drachms of the type described above exhibiting the signature **ΙΟΡ**.

It is probable that the Tarentine drachms with these Athenian types were originally struck not for internal circulation so much as a part of the federal currency of the Italiote League, and it is noteworthy that a considerable proportion of the diobols belonging to this same federal series, presenting on one side the head of Pallas and on the other Hêraklês strangling the lion, which, to judge from their fabric, belong to the same approximate date as these early drachms, were struck on the same reduced standard. The weight of this class of diobol, sixteen grains and under, corresponds, in fact, to the third of the drachms with the inscription **ΙΟΡ**. It is always possible that the didrachm standard was reduced in some

¹⁵⁶ In this hoard there also occurred didrachms of Metapontion, Hêrakleia, Thurioi, and Krotôn, all of full weight. The best preserved of these were the coins of Hêrakleia with the inscription **ΑΘΑ** (*B. M. Cat.* 33), and the Metapontine coins with the head of Leukippos, and also those with the head of Persephonê wearing a barley wreath, and with the inscription **ΑΘΑ, ΛΥ; ΛΑ**, &c. (*B. M. Cat.* 106, 108, 110, &c.), were fairly, but not so brilliantly, preserved. Two somewhat worn specimens of the very scarce Metapontine tetradrachms were also found.

of the neighbouring Magna-Græcian cities, and notably at Hêrakleia, at a somewhat earlier date than at Tarentum.

Meanwhile, as the silver staters of this city show, the Tarentines, for their own purposes, still continued to adhere to their time-honoured system, and it further appears that in the litras of the present Period, which represented the traditional small currency of the citizens themselves, the old standard was equally preserved. The didrachm, for instance, Type G, of the present Period, on the reverse of which Taras, holding a bunch of grapes, is seen associated with the signature ΑΓΑ, obviously corresponds to the litra of the full weight of twelve grains¹⁵⁷, on which the bunch of grapes appears as a symbol between the letters ΑΓ. The doe looking back,¹⁵⁸ the spear-head¹⁵⁹ and the hippocamp¹⁶⁰ which occur on other litræ and hemilitra of full weight, are also symbols otherwise solely associated with didrachms of the present Period.

Amongst the familiar schemes that continue to appear on the didrachms of this Period are the lancer on his prancing horse, and the rider holding a round shield behind him in the act of vaulting off his horse. The fine type of Nikê receiving the victorious horseman is also revived, probably at the very beginning of this Period, as in some cases it occurs without the full-length signature below ΑΥΚΙΑΝΟΞ, with which on other specimens it is associated. The general effect of these later versions is bold and grandiose, but the details, such as the horse's mane, are careless and unfinished, the folds of the drapery

¹⁵⁷ *B. M. Cat.* 406, wt. 12 grs. ; *Car. Descr.* 637, 638, 11 grs. and 11.4 grs.

¹⁵⁸ In my collection, wt. 10¾ grs.

¹⁵⁹ *B. M. Cat.* 407, wt. 12.5 grs.

¹⁶⁰ *Car. Descr.* 678 litra 11 grs. ; 677 hemilitron 5.9 grs.

have lost their skilful undulations, and we have no longer here the minute and elaborately beautiful work that characterizes the masterpiece of the artist **KAA** . . . in the prototype of Period IV. The reverse of this coin is remarkable for the energetic scheme of Taras rising to his full height with one knee on the dolphin's back¹⁶¹, a new departure in design led up to, perhaps, by the bowman of the preceding class, who places his foot on the dolphin's head. On the greater number of the coins of the present Period Taras is represented astride on his marine charger as in the prevalent scheme of Period V.

With regard to the appearance for the first time of full-length signatures on the coins of this Period, it has already been pointed out that in these signatures we have to deal with the names of magistrates rather than engravers. These names, of which we now obtain a considerable list, find no analogies in the signatures on the coins of other Magna-Græcian cities. For such analogies we have still to refer to the shorter signatures, such as **ΞA**, **ΞI**, and **Α**, which continue throughout a part of this Period, though they are now relegated to a secondary position on the coin. In the case of **EY**, as already remarked, we see the secondary signature in every case associated with designs in an abnormally bold relief, and unmistakeably proclaiming the handiwork of the same, by no means admirable, engraver. But this very group of coins, the identical authorship of which is thus attested by the initials **EY** in the field, presents us with a varied list of full-length signatures, such as **ΑΝΘΡΩΞ**, **ΑΡΙΣΤΙΑΞ**, **ΝΙΚΟΔΑΜΟΞ**, **ΝΙΚΩΝ**,

¹⁶¹ The **E** which is seen upon his shield recalls the **ΕΙC** that appears upon the shield of the armed horseman on a coin of the Pyrrhic Period VII.

ΝΙΚΩΤΤΑΞ and **ΦΙΛΩΝ**. These latter names, therefore, can have nothing to do with the actual die-sinker.

A good example of the same kind occurs in another well-marked group of coins characterized by sharply-cut figures and a peculiar lengthening and attenuation both of the mounted warriors and of their steeds. All the coins of this group are marked in the field by the initials **ΞΙ**, but the full-length names beneath the horses vary as on the coins signed **ΕΥ**. There can be little doubt, moreover, that in this case the reverse figures of Taras, which present the same characteristics as the equestrian types on the obverse, were the work of the same engraver, and that the **ΛΥ**, which occurs on the reverse of a coin of this group, refers not to the engraver, but to the magistrate **ΛΥΚΩΝ**, who, alternately with **ΔΕΙΝΟΚΡΑΤΗΣ**, signs in full on the obverse of coins of the same group, bearing the initials **ΞΙ** in the field. No one, I think, who has minutely studied the technique of Type C, No. 3, will doubt the correctness of the conclusion, that both sides are by the same engraver.

From the recurrence of the same signature **ΙΟΡ**—so typical of the silver coinage of this Period—on some gold staters,¹⁶² presenting on the obverse a head of *Démêtêr* in a somewhat later style than appears on the pieces exhibiting the two *Dioskuri* and in all probability commemorative of the Spartan alliance of 315 B.C.¹⁶³, we may refer this gold issue to the same date as the present class of didrachms. The reverse type of these staters, a boy rider crowning a stationary horse which lifts up his off fore-leg, now again becomes common on the silver issues,

¹⁶² Pl. XI. 9, Santangelo Coll.; Garrucci, Tav. c. 51.

¹⁶³ See p. 98, *seqq.*

where the youthful rider often assumes such an androgynous appearance that the figure has been described as that of a girl.

It is perhaps to the latter part of the present Period that we may also refer the earliest issues of a peculiar class of Tarentine didrachms which are based on the Campanian standard, and attain a maximum weight of about 116 grains, instead of the normal Tarentine weight of 122. Upon these coins, the constant obverse type of which is the boy rider crowning a stationary horse, the type of Taras on his dolphin is replaced by a female head displaying points of affinity with the Parthenopê or Dia Hêbê on the coins of Neapolis¹⁶⁴; but in this case no doubt portraying the nymph Satyra, the mother of Taras, whose head alternates with that of Taras himself on some of the earlier Tarentine silver pieces. The view that these coins were intended for circulation outside the Tarentine territory¹⁶⁵, in the Samnian and Apulian¹⁶⁶ districts dominated by the Campanian system, is strongly corroborated by the fact that among numerous finds of Tarentine coins, including large hoards as well as isolated specimens, made at Taranto itself or in its neighbourhood that have come under my own observation, not a single specimen belonging to this class has come to light.

That the first issue of these Campano-Tarentine coins took place at a comparatively late period, is shown by

¹⁶⁴ A good example of this resemblance is seen on the coin reproduced in Pl. VII. 13. For another fine Campano-Tarentine type see Pl. XI. 10.

¹⁶⁵ See Head, *Historia Numorum*, p. 48.

¹⁶⁶ The same type and standard were adopted at Teate in Apulia. See Sambon, *Monnaies de la Presqu'île Italique*, p. 218 (Pl. XV. 7); Garrucci, Tav. xcii. 1—3; Head, *op. cit.* p. 41.

their significant absence from the Beneventan hoard, buried, as we have seen, about 310 B.C., where, if anywhere, this class of coin would have come to light had it been already in existence, and in which Tarentine didrachms of the ordinary type were associated with Campanian silver pieces. Moreover, it is only some of the earliest and best-executed of the class that can with any probability be referred to so early a date as even the close of the present Period. Strong reasons will be given in a subsequent section,¹⁶⁷ for believing that as a matter of fact, much as it may conflict with the prevailing notions of numismatists, the great bulk of this peculiar issue must be referred to the post-Pyrrhic epoch of the Tarentine coinage.

VI. Type A.

Naked boy of androgynous aspect crowning standing horse to r., which sometimes lifts its off fore-leg. The boy's hair is bound up in a krobylos behind.

Obv.	Rev.
<p>1. In f. to l., ϵ A. Beneath horse, ΑΡΕΘΩΝ. Car. cix. 8. [Pl. VII. 1.]</p>	<p>Taras as an Ephēbos astride, &c., to l., holding out in r. hand a tripod. Beneath, CA ϵ.</p>
<p>2. A in f. to l. Beneath horse, ϵ ΩΚΡΑΤΗ ϵ. Not in Car. <i>B. M. Cat.</i>, 141. [Pl. VII. 2. A. J. E.]</p>	<p>Same, but holding olive-branch Beneath, ΙΟΡ.</p>
<p>3. In f. to l., ϵ A. Beneath horse, ΦΙΛΙΑΡΧΟ ϵ Car. cxiii. 2. [Pl. VII. 3.]</p>	<p>Same, but holding bunch of grapes. Beneath, ΑΓΑ.</p>

¹⁶⁷ See p. 170, *seqq.*



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13



Equestrian Types Period VI. 302-281 B.C.

Obv.	Rev.
4. In f. to l., ΑΓΩ. Beneath horse, ΚΡΑΤΙΝΟΞ. Car. cxi. 4.	Same, but holding kantharos. Beneath, ΙΟΡ.
5. In f. to l., A. Beneath horse, ΞΩΚΡΑΤΗΞ. Car. cxii. 18.	Taras astride, &c., to l., holding in l. hand a distaff, and extending Victory on r. In f. to r., K.

VI. Type B.

Nikê to l. seizing forelock of prancing horse, much as Per. IV., Type L, but her left arm, with which in the other instance she seizes the bridle, is here behind the horse's neck. The horseman has helmet and javelin as before, but the small round shield on his l. arm is plain. The inscription **TAPANTINΩΝ** is also wanting.

1. Beneath horse, ΑΥΚΙΑΝΟΞ. Car. cxi. 9.	Taras rising on dolphin to l., on which he kneels with his l. leg; his r. hand is extended, and in his l. are two javelins and a small round shield, upon which appears the letter E. Beneath, waves. In f. to l., ΙΟΡ.
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2. Same, but no inscription. [Pl. VII. 4, B. M.]	Same.
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VI. Type C.

Naked horseman cantering l., holding behind him small round shield, and sometimes two javelins.

1. In f. to l., ΦΙ-ΑΩΝ. Beneath horse's fore-legs, EY. Cf. Car. cxiii. 10. [Pl. VII. 5.]	Taras astride, &c., to l., holding out small Victory, who extends a wreath towards his head. Beneath, waves.
2. Same, but EY in f. to r., and beneath horse, ΝΩΛΙΦ. Car. cxiii. 11.	Same, but with left leg thrown forward.

Obv.
 3. Same, but **E** in
 f. to r., and beneath
 horse, **ΦΙΛΟΚΛΗΞ**.
 Cf. Car. cxiii. 6.
 [Pl. VII. 6.]

Rev.
 Taras astride, &c., holding out wreath.
 Beneath, **ΛΥ**.

VI. Type D.

Naked horseman on prancing horse to r., lancing downwards.
 Behind, large round shield and reserve of two javelins.

1. Beneath horse,
ΑΝΘΡΩΞ.
 Car. cix. 3.
 [Pl. VII. 7.]

Taras astride, &c., to l., holding out
 kantharos in r. hand. In f. to r., anchor;
 in f. to l. **EY**. Beneath dolphin's tail,
ΑΡ.

2. In f. to l., **ΞΙ**.
 Beneath horse, **ΔΕΙ-**
ΝΟΚΡΑΤΗΞ.
 Car. cx. 5.
 [Pl. VII. 8.]

Taras astride, &c., to l., holding
 dolphin.

3. In f. to l., **ΞΙ**.
 Beneath horse, **ΛΥ-**
ΚΩΝ.
 Car. cx. 12.

Same as No. 2.

4. In f. to l., **ΘΕ**.
 Beneath horse, **ΑΛΕ-**
ΞΑΝ.
 Car. *Descr.* 132.
 Cf. Sambon, *op. cit.*,
 p. 117.

Taras astride, &c., to l.; in his l.
 hand holding a club which rests against
 his arm, and with his r. extending kan-
 tharos.

VI. Type E.

Naked horseman to l., vaulting off prancing horse. The
 horseman holds a small round shield on his l. arm, and some-
 times a javelin. In No. 1 he is helmeted.

1. In f. to r., **EY**.
 Beneath horse, **ΝΙ-**
ΚΩΤΤΑΞ.
 Cf. Car. cx. 18.
 [Pl. VII. 9.]

Taras, &c., to r., throwing forward
 l. leg. He hurls a small javelin with
 his r. hand, and in his l. holds a javelin
 which rests on his shoulder. In f. to
 l., **ΙΟΡ**. Beneath dolphin, a hippo-
 camp.

Obv.

2. In f. to r., **EY**.
Beneath horse, **NI-**
KΩN.

Car. cxi. 20.

[Pl. VII. 10.]

Rev.

Taras astride, &c., to l., holding out
corn-spike. In f. to l., **API**. Beneath
dolphin, a spear-head.

VI. Type F.

Naked horseman galloping r.

1. In f. ? Beneath
horse, **NIKOΔA-**
MOΞ.

Car. cxii. 175.

[Pl. VII. 11. Berlin
Cab.]

Taras as child astride, &c., to l., hold-
ing distaff in l. hand and with r. extend-
ing kantharos. Beneath, a doe looking
back and **ΙOP**.

2. In f., **EY**. Be-
neath horse, **APIΞ-**
TIAΞ.

B. M. Cat. 120.

[Pl. VII. 12.]

Same type, but Taras holds out a
bunch of grapes. Beneath dolphin,
KAH or **KAN**.

VI. Type G.

Naked horseman helmeted to l., on stationary horse raising
its off fore-leg. He holds behind him a round shield seen side-
ways.

In f. to l., **ΥΞ**.
Beneath horse, **NI-**
KOΔAMOΞ.

(*Cf. B. M. Cat.* 198

"Ξ" "NIKA..?")

[Pl. VII. 13.

A. J. E.]

Taras as a child (Dionysiac type) to
l., with a tuft above his forehead, hold-
ing distaff in l. hand, and extending in
r. a bunch of grapes. In f. to r., a
cock. Beneath, **ΑΓΑ**.

VI. Type H.

Naked horseman on prancing horse to r.

In f. to r. **E[Y]**.
Beneath horse,

EYAP

XIΔA[Ξ].

[Pl. XI. 11. Sant-
angelo Coll.]

Taras as a child astride, &c., to l.,
as preceding, but with r. hand extending
lighted torch.

PERIOD VII.—THE PYRRHIC HEGEMONY.

B.C. 281—272.

Before considering the probable date of the reduction of the didrachm standard at Tarentum, we may briefly glance at the political circumstances of the Tarentines and their neighbours during the period that intervenes between the expedition of the Molossian Alexander and that of Pyrrhus. So far as Tarentum was concerned the local hostilities with the Lucanians and their allies continued, and the citizens, like the other Italiote Greeks, had much to fear from the growing power of Agathoklês of Syracuse. On two successive occasions we find them once more relying on the arms of the princely Condottieri of their Spartan mother-city. The Sicilian expedition under Akrotatos ended as we have seen in failure, but before long the continual onslaught of the Lucanians led the Tarentines to call in the services of his brother Kleonymos, who arrived with his mercenaries about the year 302. The military preparations now made so impressed the Lucanians that they concluded a peace, apparently without waiting the issue of a combat. Kleonymos, however, proved himself even more oppressive than his predecessor. He treated his allies as if they were slaves. On Metapontion refusing allegiance he succeeded in obtaining possession of the city by treachery and carried off six hundred talents of silver and two hundred noble virgins for his harem. The Tarentines eagerly seized the opportunity of Kleonymos' absence in Corcyra to throw off his hateful yoke, but the tyranny of the Syracusan seemed only the more imminent. By the conquest of Corcyra, Agathoklês had already secured a commanding position in the

Tarentine seas, and he had further engaged to supply the barbarian neighbours of the Tarentines, the Peuketians and Iapygians, with piratical vessels wherewith to plunder the shipping of the wealthy Republic, stipulating himself for a share in the loot.¹⁶⁸ In 299 by the capture of Krotôn he obtained a secure footing on the South Italian shore. But Tarentum was to enjoy a reprieve. Agathoklês was called off by Brettian and Punic wars and in 288 met with a violent end.

Meanwhile a more formidable foe was approaching the very gates of Tarentum. So long as the struggle between Rome and the Samnites had seemed doubtful the Tarentines could afford the part of lookers-on. But with the defeat of the Samnites the most formidable obstacle to the progress of the Roman arms towards the Ionian Sea was removed, and in 292 the great rival of Tarentum for Italian hegemony founded the military colony of Venusia, only two marches distant from Tarentum itself. Thurioi had concluded an alliance with Rome and the same was imposed on the Lucanians. In 284 the breach of this treaty, due to the Lucanian chieftain Stenius Statilius attacking Thurioi, brought about a state of hostilities which was in fact the beginning of the struggle between Rome and Tarentum. Thurioi now received a Roman garrison and the *casus belli* was supplied by the Romans formally breaking the treaty (when concluded we are not told) according to which their navigation was confined to the

¹⁶⁸ Diod. xxi. 4. In the fragmentary form in which this notice appears, the name of Tarentum does not occur. But the expression *ὁμόρους*, as applied to the Iapygians and Peuketians, can only refer to Tarentum. It has certainly no reference to Krotôn, the capture of which is mentioned in the preceding paragraph.

West of the Lakinian promontory. The sinking of the Roman squadron which had appeared within actual sight of their city by the infuriated Tarentines was the beginning of hostilities, rapidly followed by the capture of Thurioi and the surrender of its Roman garrison. The Thurians were punished by the triumphant Tarentines "because, although they were Hellenes they had thrown themselves on the protection of the Romans and not of their kinsmen." The die was cast. The overtures of the Romans, then anxious to gain time, for a peaceful settlement were rejected, and in 282 the Tarentines and their allies called to their assistance the greatest soldier of the age, Pyrrhus of Epirus.

It is to the date of Pyrrhus' expedition that I venture to refer the reduction of the Tarentine didrachm weight. It has been already shown in the preceding section that federal drachmæ answering to a silver stater of reduced weight had been already struck by the Tarentines during Period VI., side by side with didrachms and litras of the full traditional standard, and the inference has been drawn from this, that the weight of the silver stater in other Italiote cities had already been reduced before Pyrrhus' time. It is to be observed, on the other hand, that at Metapontion, taken by the Lucanians shortly before 300 B.C., and at Krotôn, sacked by Agathoklês in 299, no didrachms or silver staters of reduced weight are forthcoming, and it is therefore probable that at Hêrakleia and Thurioi the reduction did not take place till after that date. The issue of the reduced federal drachms at Tarentum during a considerable part of Period VI. may, on the other hand, be taken as an indication that some at least of the League cities of the Ionian shore had reduced their standard at least not long after the date of the

capture of Metapontion and Krotôn. Tarentum, however, as has been shown, still held on for a while to its traditional metric arrangements, so far at least as its internal currency was concerned.

The dual monetary system, however, thus introduced could not have been satisfactory in its practical working, and the reduction of the didrachm and litra standard at Tarentum itself in conformity with that of its federal drachmæ and diobols was not long delayed. That the Tarentine didrachms struck at the time of Pyrrhus' Italian campaigns were already of the lighter standard is evident from the occurrence, on some of the earliest didrachms of the reduced weight, of the elephant symbol which we have every historic reason for connecting with the Epirote King. A minuter examination of the evidence at our disposal reveals the fact that the reduction of the didrachm weight at Tarentum from c. 123—120 to c. 102—99 grains took place shortly after Pyrrhus' arrival, and must on every ground be connected with that event.

Besides the didrachms of reduced weight showing on their reverse the elephant symbol we find other certain evidence of Pyrrhus' influence on the Tarentine mint. There exists in the Berlin Cabinet a gold stater¹⁶⁹ presenting on the obverse the laureate head of Zeus to the right, and on the reverse an eagle with unfolded wings, seated to the left on a thunderbolt, in front of which is a figure of Pallas Promachos, precisely as she appears on the well-known coins struck by Pyrrhus himself in

¹⁶⁹ By the kindness of the Director, Herr von Sallet, I am enabled to give a representation of this coin, Pl. V. 17. (Cf. Friedländer und Sallet, *Das kœnigliche Münzkabinet*, No. 512, p. 147.)

Syracuse.¹⁷⁰ The main types themselves, the head of Zeus and the eagle on the bolt, are characteristically Epirote, and we are thus enabled to refer with confidence a series of gold Tarentine staters of the same class as the above, but with varying symbols, to the time of Pyrrhus' expedition or the immediately succeeding Period. That this class of Tarentine gold coins is, in fact, posterior in date to the types presenting the veiled head of Dêmêtêr, and at least to the earlier of those with the youthful Hêraklês coifed in the lion's skin, is evident, not only from their style, but from their absence from the Tarentine gold-find of Alexander the Great's time, already described.¹⁷¹

The following may be taken as a summary of the other Tarentine staters of this Pyrrhic type, showing the symbols and signatures with which they are associated.

Obv.	Rev.
2. Head of Zeus to l.; Κ behind. Car. ciii. 1. 133·08 grs., 9·62 grammes.	Eagle to l., owl in front, ΣΩΚ behind.
3. Same. B. M. Cat. 1. 131·3 grs., 8·5 grammes.	Eagle to r. In front, two stars above two amphoræ. Beneath thunderbolt, ΝΙΚΑΡ .

¹⁷⁰ Cf. Head, *Coins of Syracuse* (*Num. Chron.*, 1874, p. 56). The goddess represented is probably Athena Alkis, the tutelary goddess of the royal Macedonian city of Pella, Alexander the Great's birthplace. The type, as Mr. Head has pointed out, was adopted as a symbol of sovereignty over Macedon, and first appears on the coins struck by Ptolemy I. for the young Alexander Ægos, the son and rightful heir of Alexander the Great.

¹⁷¹ See p. 97, and *Notizie dei Scavi*, 1886, 279. The gold types with the youthful head of Hêraklês seem to have gone on, however, to a very late period, and this type was apparently revived in Hannibal's time (see p. 209).

Obv.	Rev.
4. Same. <i>B. M. Cat.</i> 3. 132·3 grs. 8·57 grammes.	Same; but NIKAP behind eagle.
5. Same. <i>B. M. Cat.</i> 2. 131·7 grs., 8·52 grammes.	Same; ΦΙ above; beneath, thunder-bolt ...?
6. Head to r., NK behind. <i>Car. ciii.</i> 2. 133·4 grs., 8·65 grammes.	Eagle to l.; in front Α .
7. Same; (hair somewhat differently treated). NK behind. <i>Car. ciii.</i> 4.	Same; in front, Α ; above, Σ .
8. Same; but K behind. <i>Car. ciii.</i> 6.	Eagle to r.; in front, ΑΡΟΛ , and helmet with cheek pieces.

From the identity of the signatures, as well as of the reverse type, we are further entitled to regard the following quarter staters as belonging to the same group.

1. Head of Apollo laureate, r. In front, NK . <i>Car. civ.</i> 22. Wt. 33·27 grs., 2·156 grammes. [Pl. V. 15.]	Eagle on thunderbolt as before; in front, Α and spear-head. Beneath, ΙΑ .
2. Same. <i>Car. civ.</i> 21.	Same; but in front ΦΙ , and two stars above two amphoras.
3. Same; no insc. <i>Car. civ.</i> 23. Wt. 33·27 grs., 2·156 grammes.	Same; no symbol or insc.

These Pyrrhic gold types of Tarentum supply us with some valuable data for fixing the contemporaneity of certain silver types of the same city. Amongst the symbols that appear on the above gold series one of the most interesting and characteristic is the spear-head which is seen in front of the eagle and bolt on the quarter-stater (No. 1) associated with the signatures **Α** and **ΙΑ**. The spear-head badge, which the Æakid princes took in virtue, it would seem, of some traditional connexion with the Ætolian Meleagros¹⁷², and which the Molossian Alexander had already placed on his Italian coinage, became at a later period a recognised type of the autonomous Epirote mints. Although Pyrrhus himself does not seem to have placed this symbol on coins struck by him in his own name, the appearance of the spear-head on a Tarentine piece, coupled with a type and signature that place it among the Pyrrhic issues of the city, must be taken as an evident allusion to the Epirote hero. On the quarter-stater referred to this symbol is seen associated with the monogram **Α**, which obviously belongs to the same magistrate or moneyer who on a stater of the same series signs **ΑΙ** for **ΑΠΙ**. When, then, we find the same symbol of a

¹⁷² So, for example, we find (Arrian, *Anab.* i. 24) that conversely the father of Meleagros, a distinguished general of Alexander the Great, bore the typically Æakid name of Neoptolemos. The Illyrian, like the Epirote princes, claimed Æakid descent, and it was no doubt owing to this connexion that the Illyrian Monounios placed the spear-head symbol in association with the jawbone of the Calydonian boar on his Dyrrhachian staters. Meleagros was said to have dedicated the spear, with which he slew the monster, to Apollo, in the temple at Sikyôn, where Pausanias (ii. 7) describes it. The spear-head as a symbol of the Epirote king, recalls a line of the Tarentine Leônidas' epigram on Pyrrhus (c. xxiv. 4): "Αἰχμηταὶ καὶ νῦν καὶ πάρος Αἰακίδαί."

spear-head occurring on a silver didrachm (VI., E 2, Pl. VII. 10)¹⁷³ in association with the signature **API** we are justified in concluding that both pieces belong to the same approximate date.

Judging from its style, this didrachm with the spear-head symbol is one of the latest of the full-weight issues. But the close relationship thus established between one of the latest of the full-weight didrachms and a quarter gold stater of Pyrrhic type has a very important bearing on the chronology of the Tarentine silver coinage. It certainly tends to show that some at least of the full-weight issues were struck as late as 282 B.C., when the Tarentines concluded their bargain with the Epirote king. We find, moreover, on another Pyrrhic gold stater of the type presenting on the reverse the eagle on the thunder-bolt the signature **ΞΩΚ**, apparently only an abbreviated form of the **ΞΩΚΡΑΘΞ** which occurs on two other types of the same Period VI. (A 2 and 5), in one case also associated with the monogram **Α**. The signature **ΞΩΚ**, on the other hand, does not answer to any name that appears on the ensuing didrachm series of reduced weight.¹⁷⁴

The conclusion to which we are led by these coincidences, that the issue of the silver didrachms of full weight

¹⁷³ The lance-head also occurs as a symbol on a litra (*B. M. Cat.* 407), which from its weight, 12.5 grs., must have been struck previous to the reduction of the silver standard, and which bears the signature **ΑΓ**, an indication that it belongs to Period V.

¹⁷⁴ The name **ΞΩΚΑΝΝΑΞ**, another possible completion of the abbreviated form **ΞΩΚ**, only occurs at a time which places it out of the range of comparison with the Pyrrhic gold-pieces (see Period X.). The earlier **ΞΩΚ** of Period III. is also one of the field of comparison.

continued, in fact, at Tarentum to the date of Pyrrhus' expedition, involves, as its logical consequence, the further deduction that it was directly or indirectly to the Epirote king that the reduction of the weight of the silver stater in this city was actually owing. The occurrence of the elephant symbol on some of the earliest of the reduced weight issues shows that the change of weight must have taken place soon after Pyrrhus' arrival; and that the reduction of the Tarentine silver standard should have been effected at a time when the mint was practically under Pyrrhus' control, fits in well with the monetary revolution subsequently carried out by him at Syracuse in his own name.¹⁷⁵

That the reduction of the Tarentine silver standard in fact took place during the time when the Epirote king was exercising a dominant influence over the city receives additional corroboration from a comparison of two remarkable Tarentine silver litras, both stamped with Pyrrhic symbols. The first of these (Pl. V. 16) presents on the obverse the usual scallop, and on the reverse, below the dolphin, a figure of Pallas Promachos as she appears on the coins of Pyrrhus, and the signature Δ . The weight of a specimen of this coin in my own cabinet is, as nearly as possible, 12 grains (0.76 gramme),¹⁷⁶ and exactly corresponds to the

¹⁷⁵ There is, however, no evident relation between Pyrrhus' Sicilian pieces of c. 90 grs. and the reduced didrachms of Tarentum, &c., weighing c. 100 grs. It is clear; indeed, that as the new Pyrrhic currency dominated the Brettian country and the whole of South-Western Italy, an official tariff, making these the equivalent of the reduced didrachms of the Italiote cities, would have had favourable results for the royal exchequer.

¹⁷⁶ The weights of three coins, of the same type and symbol, given by Carelli, are 11.396, 11.09, and 10.298 grains, exactly agreeing with that of the litra with the signature $\Lambda\Gamma$ and the

full didrachm weight of about 120 grains.¹⁷⁷ This is the normal weight of the litra down to the conclusion of Period VI., as is shown by correspondences of symbol and signature with those of didrachms belonging to that Period.¹⁷⁸ But, as appears from another interesting piece, of which there is a specimen in the British Museum,¹⁷⁹ the litræ of reduced weight began already to be struck during the period of Pyrrhus' domination. On this litra (Pl. V. 18) the significant symbol of an elephant replaces the figure of Athênê Alkis beneath the dolphin, and the weight, 8·7 grs., brings it well within the margin of the inferior standard— $9\frac{1}{2}$ grs. being about the normal weight of silver litras that can be shown to correspond to the didrachms of the reduced weight.¹⁸⁰ We are left to infer that the reduction of the silver standard at Tarentum took place between the issues of these two litræ, and we may further conclude that of the two Pyrrhic badges on the Tarentine coinage the figure of Pallas Promachos precedes that of the elephant.

The fact which we may now, therefore, regard as esta-

bunch of grapes belonging to Period VI. The weights of two specimens of these latter, as determined by Carelli, are 11·396 and 11·09 grains.

¹⁷⁷ Carelli (cxvii. 297) has engraved what is obviously the same piece, but the figure of the goddess has been wrongly rendered, and resembles rather a figure of Mars. Its weight is 0·74 gramme (cf. Mommsen, *op. cit.* I. 294), which is almost identical with that of my example.

¹⁷⁸ See p. 128.

¹⁷⁹ *B. M. Cat.* 402. Carelli gives the coin (cxvii. 319), but not the weight.

¹⁸⁰ The average weight of the litræ of the great Taranto hoard belonging to this late Period is c. $9\frac{1}{2}$ grs. (See Appendix C.) The litræ in *B. M. Cat.*, 393—4, with the signatures Ψ and $\overline{\Lambda}$, which occur on a very late didrachm with the magistrate's name **APICTIPPOC**, weigh 9 grs.

blished, that the last issues of the full-weight didrachms were struck as late as 282 B.C., may possibly throw a new light on one of the latest of these types. This is the piece [VI. D 1] presenting on the obverse the name of the magistrate **ANOPΩΞ** (whose name in an abbreviated form recurs on two early coins of the reduced weight), and on the reverse the symbol of an anchor, accompanied with the signatures **EY AP**, which recalls the combination **EY API** on the Pyrrhic type presenting the spear-head. But there is a good analogy for supposing that the anchor, like the spear-head itself, the figures of Pallas Promachos or of the elephant on the contemporary pieces, has an historic significance. On a late Tarentine obol¹⁸¹ there appears as the reverse type an anchor coupled with a laurel wreath or spray, evidently intended as a trophy, which Fiorelli has brought into relation with the maritime victory gained by the Tarentines under Dêmokratês over the Roman fleet off Krotôn during the period of the Hannibalic occupation.¹⁸² This victory was

¹⁸¹ Described by Fiorelli, *Medaglie incerte di Taranto*, in Bull. dell' Inst. Arch., 1841, p. 174. Fiorelli has unfortunately not given the weight of the piece, but from the kantharos, surrounded by three pellets, which forms the obverse type, it may be assumed to have been an obol or sixth of a drachm (cf. Mommsen, *op. cit.* p. 146). Garrucci (c. 25) gives another similar coin, but with five pellets on the obverse and four on the reverse, but omits, as usual, to give the weight. The number of pellets five, four, and three, or even one on these small Tarentine pieces presenting the kantharos, has no visible relation to the weight (cf. *B. M. Cat.* 432—447.) The weights fall into two classes, one of slightly under 10 grains, answering to the sixth of a drachm of full weight; the other of c. 8 grs., standing in the same relation to the reduced drachm of c. 50 grs. In one case only the abnormally low weight of 5·7 occurs. (Cf. too Mommsen, *op. cit.* p. 297.)

¹⁸² Livy, lib. xxvi. c. 39.

commemorated in an inscription found on the Tarentine site recording the erection of a trophy "to the marine and hippic gods" out of the spoils of the captured vessels. Whether Fiorelli be right or wrong in assigning this occasion for the issue of the small silver type that he describes, its occurrence certainly seems to show that the anchor on a Tarentine coin¹⁸³ was regarded as a symbol of naval victory, and although on the didrachm that we are at present considering it is not coupled with a laurel spray, its appearance on a piece struck about the time of Pyrrhus' expedition must be regarded as highly significant. We recall the memorable occasion of the first open hostilities with Rome, the sinking or capture of the Roman galleys which, in open violation of the treaty that limited their right of navigation to the Lakinian promontory, had appeared in Tarentine waters in full sight of the citizens then celebrating the Dionysia in the theatre.

It further appears that besides the coins with such indubitably Pyrrhic symbols as the elephant, the eagle on the bolt, or Athênê Alkis, additional references to the arrival of the Epirote king are to be traced on some of the earliest didrachms of the reduced weight series.

These appear on a curiously parallel series of coins signed **APIΞ** and **ΠΟΛΥ**, both associated with signa-

¹⁸³ The anchor also occurs on a didrachm of reduced weight, coupled with the signature of **APIΞΤΙΞ**, and on a drachm, apparently of the same magistrate, but signed **APICTIC**; it serves as a perch for the owl. It further appears on a litra (wt. 0.52 gramme), Car. cxvii. 312. It is probable that the piece described by Fiorelli fits on to this series. If so, it may contain an allusion to some naval action unrecorded by history, and the date of which would be between the Pyrrhic and Hannibalic periods.

tures belonging to coins with the well-known Pyrrhic badge,¹⁸⁴ and the first of the two apparently identical with the magistrate who, under the abbreviated form **AP** or the fuller **APIΞΤΙΠ**, attaches his signature to pieces that present the elephant symbol. There are two coins, Type A, 2—4 [Pl. VIII. 2, 3] signed **ΠΟΛΥ** on the reverse, in both of which Taras is seen holding out his hand to receive a small Victory, who reaches forth a wreath to crown his head. On one of these the Epirote symbol of the thunderbolt, adopted on their Italian coinage both by Pyrrhus and his predecessor, the Molossian Alexander, appears in the field, while on the other, below the dolphin, in the place occupied by the elephant on contemporary pieces, is seen the prow of a galley, characterized by a projecting beak and a high curving akrostolion (*χηνίσκος*), which itself curiously resembles a raised proboscis. The alternation of the thunderbolt and the prow of the war vessel on these twin coins may be aptly regarded as covering an allusion to the arrival of Pyrrhus' fleet at Tarentum.

Two other types [C 2, 3], one signed **ΠΟΛΥ** (Pl. VIII. 6), the other **APIΞ**, but which in other respects are identical, afford, however, some still more suggestive materials for comparison. Upon the reverse of these Taras is represented seated sideways on his dolphin, to the left, resting his left hand on its back, and holding out with his right a helmet of remarkable shape, having ear-pieces, and in front a projecting horn. In the field on either side are two stars, and the coin thus shows a certain analogy with

¹⁸⁴ Thus we find the parallel groups **ΙΩ ΝΕΥΜΗ—APIΞ**, two stars; **ΙΩ ΝΕΥΜΗ—ΠΟΛΥ**, two stars; and **ΙΩ ΝΕΥΜΗ—AP**, elephant. (See *infra*.)



Period VII, 281-272 B.C. Pyrrhic Hegemony



the noble type already described, and in which I have ventured to trace an allusion to the fall of Archidâmos. In the present case, however, not only is the style very much inferior to the other, but the attitude in which Taras is represented is wholly new on the Tarentine dies. The attitude in which the Eponymic hero here appears is in fact nothing less than a direct reproduction of that in which Apollo is made to appear on some well-known types struck by the Diadochi in Syria and Macedonia, the only difference being that here the figure holds a helmet in place of a bow or arrow. The style is the same, and we have the same somewhat attenuated proportions of limbs and body. Nor is the reproduction by any means confined to the attitude and style of the figure. By an extraordinary departure from the received manner of depicting the Eponymic hero, Taras is here represented with hair knotted behind and falling over his shoulders in curling tresses, exactly as Apollo's hair is treated on the coins of Alexander's successors, from which the scheme of the figure itself was taken.

The earliest example of this type seems to be the Apollo on a bronze piece of Seleukos Nikâtor¹⁸⁵ (312—280 B.C.), which itself is an adaptation of an almost similar type that appears on a silver double stater of the Cypriote King Nikoklês of Paphos¹⁸⁶ (310—305 B.C.). On the silver as well as the bronze coins of Nikâtor's son, Antiochos I. (293—261), this design becomes usual, and it is common on the coins of his successors to the middle

¹⁸⁵ *B. M. Cat., Seleucida*, Pl. II. 5, and cf. Prof. Gardner's remarks, p. xv.

¹⁸⁶ Mionnet, *Suppl.* vii. 310. The only difference in the scheme is that the hand holding the bow rests on the r. leg instead of being raised.

of the third century. On these Seleukid coins Apollo is seen seated on the omphalos and holding a bow and one or more arrows. On some Macedonian coins of Antigonos Gonatas¹⁸⁷ Apollo again appears in the same attitude, but seated on the prow of a vessel, the occasion of the adoption of this type being in Dr. Imhoof-Blumer's opinion¹⁸⁸ the victory gained by Gonatas over the Egyptian fleet off Cos in 265 B.C. This being admitted, it is impossible to regard this Macedonian coin as the prototype of our two Tarentine pieces, and we are reduced to look to a Syrian source. The coin signed **ΠΟΛΥ** and that signed **ΑΡΙΞ** present an obverse type identical both in its design and its double signature **ΙΩ ΝΕΥΜΗ**, with another piece bearing upon its reverse the elephant symbol, and we have therefore the strongest grounds for assigning them to the date of Pyrrhus's expedition. It follows therefore that it is to the coins of Antiochos I. of Syria that we must look for the model from which the Tarentine engraver drew his novel scheme of Taras.

But this conclusion is borne out by another remarkable feature in the design. Comparing one example with another, the head-piece in Taras's hands is seen to have a distinct horn in front, and to be in fact the counterpart of the horned Asiatic helmet adopted in somewhat variant forms by Seleukos Nikâtor, and which

¹⁸⁷ Accepting the view that these coins are to be referred to Gonatas rather than Dôsôn.

¹⁸⁸ *Monnaies Grecques*, p. 128. For myself I cannot refrain from expressing a suspicion that the coins of Antigonos Gonatas, with this naval type, were struck at an earlier date in his reign. Already in 280 we find him aiding Pyrrhus with his ships. He had inherited his naval power from his father Dêmétrios Poliorkêtês, and there seems no good reason why he should not have alluded to it on his earliest coinage.

seems from its reappearance in a more exaggerated style on later coins¹⁸⁹ to have been used as a sort of badge by the Seleukid kings. A helmet of the same kind appears on some of the Pyrrhic gold staters struck at Tarentum¹⁹⁰ as a symbol beside the eagle on the bolt; a type which as we have seen is otherwise associated with the Macedonian device of Athênê Alkis. Held in the hands of Taras as assimilated to the Apollo of Antiochos I.'s monetary cult, it enhances the definiteness of the allusion, and conveys an obvious compliment to the son of the recently deceased "Conqueror" of the East, who died the year before Pyrrhus's expedition. Nor, if we consider the circumstances of Pyrrhus's Italian enterprise, is the occasion of this numismatic tribute far to seek. The royal contemporaries of the Epirote Prince, however great their mutual rivalries, had at least the common interest of seeing the greatest warrior of the age embarked in Western adventures which took him far away from their own dominions. Accordingly, as Justin informs us, Ptolemy Keraunos supplied five thousand foot soldiers, four thousand horsemen, and fifty elephants, and Antigonos ships for the transport of the expeditionary

¹⁸⁹ *E.g.* Antiochos VI. and Tryphôn, *B. M. Cat., Seleucidae*, Pl. xix. 7, xx. 1—3. As a symbol in the field it occurs on coins of Antigonos Gonatas, associated with the type of Athênê Alkis.

¹⁹⁰ *B. M. Cat.*, 4, with the signature ΑΡΟΛ (see p. 141, No. 8). Carelli (ciii. 6) wrongly represents it as a Phrygian cap. The signature ΑΡΟΛ on these Pyrrhic staters is not to be confounded with the ΑΡΟΛ on the earlier types of Alexander the Molossian's time. It is to be identified rather with the magistrate who signs ΑΡΟΛ, and in the fuller form ΑΡΟΛΛΩΝΙΟΞ on some of the earliest didrachms of reduced weight. The form ΑΡΟΛ is found on these in close association with the signature ΡΟΛΥ.

force. Antiochos, "who was better provided with wealth than soldiers, supplied a sum of money," which if it was at all the equivalent of these other subsidies must have been of considerable amount. We have here at least a very substantial reason for the influence of Antiochos' tetradrachm types on the Tarentine dies, and for the compliment that they seem to convey to the son of Seleukos.

The internal evidence supplied by a series of types, symbols, and signatures, thus enables us to group together a series of didrachms of the reduced weight which may with confidence be ascribed to the time of the Pyrrhic hegemony at Tarentum. In this earliest class of reduced weight coins may be reasonably included (1) those with a known Pyrrhic badge; (2) those intimately connected with the above in signature and device, as, for instance, the coins already alluded to with the signatures **ΙΩ ΝΕΥΜΗ, ΠΟΛΥ, ΙΩ ΝΕΥΜΗ ΑΡΙ, ΑΡΟΛ ΠΟΛΥ**, and several varieties with **ΓΥ** in the field; (3) a few coins presenting the greatest resemblance to the latest full-weight types of Period VI., or with the same collocation of names, as in the case of the reduced weight didrachm reading **ΞΙ ΛΥΚΩΝ**.

Happily, however, in endeavouring to determine the Tarentine silver issues of the Pyrrhic Period, we are no longer restricted to the internal evidence to be deduced from the connexity of types and signatures. It was not till after I had arrived at the results explained in the preceding pages, that I had an opportunity of inspecting a recent find of Tarentine coins, which throws a welcome light on the coinage of this Period, and at the same time affords a strong retrospective corroboration of the general conclusions already elaborated.

The hoard in question, of which all I could learn was that it came from Calabria, and was discovered towards the end of 1887, must in its original form have been of considerable bulk. Whilst recently at Naples I was enabled to inspect and describe between four and five hundred pieces belonging to it that had not yet been dispersed, but many had already found their way into the Paris and London markets. A succinct account of the coins that I saw together will be found under Appendix B. They were for the most part in brilliant condition, and with a single exception—the coin reading **ΔΕΙΝΟ-ΚΡΑΤΗΣ** belonging to the last Period of the full-weight issues—all were of the reduced standard. The great interest attaching to this find is due to the fact that it includes the whole of the earliest group of the reduced weight coinages, and at the same time apparently coincides with the Period of the Pyrrhic hegemony.

Of seventeen varieties which on grounds of internal evidence I had already before the discovery of this find ventured to attribute to the Pyrrhic Period,¹⁹¹ no less than fifteen were represented in the present deposit by well-preserved specimens. Together with these were seven fresh varieties which must certainly be regarded as more or less contemporary with the others. From the absence on these, however, of the more definite Pyrrhic indications, as well as from the greater abundance and singularly brilliant condition of most of them, it is reasonable to suppose that they belong to the later years of the Epirote connexion, when Pyrrhus had himself recrossed the Adriatic. There can indeed be little doubt that the occa-

¹⁹¹ Type A 1—5; B 1; C, 1—7; D 1; E 1—2.

sion of the Calabrian deposit is to be sought in the circumstances which attended the Roman occupation of Tarentum in 272. The fact, however, that a few coins of the present hoard presenting the signatures **ΝΚ ΦΙΑ-ΟΚΡΑ** seem rather to attach themselves to a succeeding post-Pyrrhic group makes it probable that the actual deposit did not occur till a short time after the Roman entry into Tarentum. These few pieces in all probability represent the first issue of the new régime, and I have accordingly included them among the types of the First Period of the Roman alliance.¹⁹²

The most abundant types represented in this hoard were those associated with the signature **ΑΡΟΛΛΩ**, to be identified with the later **ΑΡΟΛΛΩΝΙΟΞ**, and **ΑΝΘ** or **ΑΝ**, which recalls the **ΑΝΘΡΩΞ** of the last full-weight issue. With the Tarentine didrachms were a certain number of drachms, also of the reduced weight, bearing the signatures **ΞΩΞ-ΔΙΟ**, **ΞΩ-ΔΙ**, **ΑΠ-ΔΙ**, and of **ΝΕΥΜΗΝΙΟΞ** in association with **ΠΟΛΥ** and **ΑΡΙ**, and it is evident, as much from a comparison with the didrachm signatures of this Period as from their occurrence in the present find, that these drachms must also be ascribed to the time of Pyrrhus. The only non-Tarentine coins contained in the hoard were some late types of Hêracleia and Thurioi, which from their fresh condition must be held to be contemporary with the most recent Tarentine issues of the deposit. The coins of Hêracleia in particular with **ΦΙΑΟ** in the field representing Hêrâklês standing, and another type with a thunderbolt in the field, in which the same hero is seen sacrificing over

¹⁹² VIII. A 5; C 2 and 3.

an altar, were *fleur de coin*, and must have been struck very shortly before the withdrawal of the hoard from circulation.

The contents of the Calabrian find show that the period of the Pyrrhic connexion at Tarentum was a time of prolific mintage. It is evident indeed that Tarentum was called on to defray a large part of the expenses of Pyrrhus's Italian enterprise, and the moneyers seem to have been kept exceptionally active by the constant exactions of the Epirote ally. The fine state of preservation in which the whole of the twenty-nine didrachm types contained in this hoard were discovered, itself affords unmistakeable evidence that the reduced-weight issues could not have been current many years at the date when this hoard was withdrawn from circulation. Even were there not such strong historical probabilities as to the actual occasion of this deposit it would not be safe to bring it down more than ten years after the date of the first issue of the didrachms of the reduced weight. It is noteworthy that the single specimen of a didrachm of full weight found in the hoard was itself in fine condition.

The occurrence of the signatures ΕΥ, ΘΙ, or ΙΩΓΥ, on Pyrrhic types of the Calabrian hoard has enabled me to add to the series some other excessively rare types (H, K, and L), one of which presents these signatures combined. On the reverse of two of these is seen a revival of the interesting design of Taras contemplating a heroic helmet, to which attention has been sufficiently called under Period IV., while the obverse of K and L (Pl. XI. 12, 13) shows us the horseman in a new attitude, seated sideways on his horse—a design repeated on some

votive terra-cottas from the site of a Chthonic sanctuary at Tarentum, to which attention has already been called. Another very rare piece, M 1 (Pl. VIII. 14) equally absent from the Calabrian hoard, in which a boy jockey is seen at full gallop holding out behind him the torch of the *lampadedromia*, must also be included in the same series, from its similarity both in design and signatures with type L 1 (Pl. VIII. 13). In the one case the name of the monetary magistrate appears as **HPA**, in the other as **HPAKAHI**, which is probably an abbreviation of the official who signs in full as **HPAKAHTOΞ** during the succeeding Period. We shall have occasion to return to the interesting agonistic type with which this name is connected.

From its parallelism with the type of the armed horseman with the radiate shield, I have also added to the present class a remarkable piece, F 6 (Pl. VIII. 12); a specimen of which exists in the Bodleian Collection, exhibiting upon the shield the three letters **EIC**. This inscription is doubtless an amplification of the single **E** borne by Taras on his shield upon two coins of Period VI. (B 1—2). It would, however, be overbold were we by the light of later numismatics to attempt to explain the inscription as referring to an **ΑΓΩΝ ΕΙΣΕΛΑΚΤΙΚΟΣ**, which in this case might, of course, be brought into relation with a triumphal entry of the Epirote king.

VII. Type A.

Naked horseman (sometimes helmeted) on prancing horse to r., lancing downwards, and with round shield and reserve of two lances behind him.

Obv.

1. In f. to l., ΓΥ; beneath horse,

ΑΡΙ
ΞΤΙ
Γ

Car. ex. 127.

[Pl. VIII. 1.]

2. Same; in f. to l., ΓΥ. Beneath horse, ΞΩΣΤΡΑΤΟΞ.

[Pl. VIII. 2.]

3. Same; in f. to l., ΕΥ. Beneath horse, ΞΩΣΤΡΑΤΟΞ.

Car. cxiii. 198.

4. Same; (helmeted). In f. to l., ΕΥ. Beneath horse, ΦΙΝΤΥΛΟΞ.

Cf. Car. cxiv. 212.

["ΕΥ ΦΙΝΤΙΑΞ
—ΛΥ."]

[Pl. VIII. 3.]

5. Same; in f. to l., ΘΕ. Beneath horse, ΑΛΕΞ.

Car. ex. 117.

6. Same; but to r. small Victory flies forward extending wreath. In f. to l., ΞΙ. Beneath horse, ΛΥΚΩΝ.¹⁹³

Cf. Car. cxii. 169.

["ΕΥ ΛΥΚΩΝ."]

Rev.

Taras riding in warlike fury on his dolphin (revival of Pl. IV., 8 and Pl. VI. 12), preparing to fit an arrow to his bow. Beneath, ΔΙ and elephant.

Taras astride, &c., to l., holding cornucopie in l. hand, and with r. receiving small Victory, who holds forth a wreath to crown his brow. In f. to l., ΠΟΛΥ; to r., thunderbolt.

Same.

Same; but holding in l. hand trident. In f. to l., ΠΟΛΥ. Below dolphin, prow of vessel.

Taras, astride, &c., to l., holding trident in l. hand, and with r. extending wreath. In f. to r., ΞΙ; beneath dolphin, star.

Same; but extending kantharos. In f. to r. ΓΥ or ΥΓ.

¹⁹³ The two signatures ΞΙ, ΛΥΚΩΝ, are associated on one of the latest full-weight didrachms of a slightly different type, VI. D 3.

VII. Type B.

Naked boy on horse walking l., which is received and crowned by a standing male figure (revival of Pl. IV. 8).

Obv.	Rev.
1. In f. to r., ΓΥ . Beneath horse, API ΞΤΙ Γ Car. ex. 126. [Pl. VIII. 4.]	Taras riding on dolphin as A 1, with bow and arrow. Beneath, elephant, and sometimes ΔΙ .

VII. Type C.

Naked boy-rider crowning stationary horse (generally to r., and lifting up fore-leg).

1. In f. to l., ΙΩ . Beneath horse, NEY MH <i>B. M. Cat. 147.</i> [Pl. VIII. 5.]	Taras riding on dolphin, with bow and arrow as before. Beneath dolphin, Α , and elephant.
2. Same.	Taras seated sideways on dolphin to l., holding out a horned helmet. On either side a twelve-rayed star. In f. to r., APIΞ .
3. Same. Car. cxii. 174. [Pl. VIII. 6.]	Same; but in f. to r., ΓΟΛΥ .
4. ¹⁹⁴ Same; but in f. to l., Α . Beneath horse, ΔΑΜΟΚΡΙ .	Taras astride, &c., holding in l. hand trident and small round shield, on which is a hippocamp, and extending with r. a cornucopiæ.

¹⁹⁴ For the signature **Α**, and a very similar obv. and rev. type, see Type E. For rev. see also Type D. In both cases the type is associated with the characteristically Pyrrhic signature **ΓΥ**.

Obv.

5. Horse to r. In f. to l., **EY**. Beneath horse, in minute letters, **ΑΡΟΛΛΩ** and two amphoras.

[Pl. VIII. 7.]

6. Same.

Car. ex. 119.

7. Same; but in f. to l., **FI**. Beneath horse, **ΑΡΟΛΛΩ**, and two amphoras.

8. Same; horse to l. In f. to r., **FI**. Beneath horse, **ΙΩΠΥ**, and small squatting figure holding horn.

[Pl. VIII. 8.]

Rev.

Taras astride, &c., to l., holding trident in l. hand, and with r. extending kantharos. In f. to r., **ΘΙ**.

Same; but in f. to r. **B**, to l. **ΘΙ**.Same; but in f. to r., **ΘΙ**.

Taras astride, &c., to l., holding distaff in l. hand, and with r. receiving small wreath-bearing Victory. In f. to l., **✱**.

VII. Type D.

Two Dioskuri with flowing mantles, cantering l. (Revival of IV. K).

1. Inf. above, **Φ**. Beneath horse, **ΞΑΛΩ-ΝΟΞ**.

[Pl. VIII. 9.]

Car. cxiii. 184.

Taras astride, &c., to l., holding behind him two lances and a small round shield with hippocamp device, while with r. hand he receives small wreath-bearing Victory. In f. to l., **ΓΥ**. Taras has a tænia round his head; beneath, waves.

VII. Type E.

Single Dioskuros with flowing chlamys l., holding out wreath to crown his horse's head. The horse paces r.

1. Inf. to l., **Α**. Beneath horse, **ΞΑΛΩ-ΝΟΞ (?)**

[Pl. VIII. 10.]

Same as D 1; and with same legend **ΓΥ** in f. to l.

Obv.	Rev.
2. Same; no letters in f. Signature beneath horse uncertain.	Taras astride, &c., to l., in a Poseidonian attitude, ¹⁹⁵ with back half turned to the spectator, hurling trident with r. hand, and with chlamys hanging from his l. arm. In f. to l., ΓΥ .

VII. Type F.

Helmeted warrior on horse, cantering l., wearing crested helmet, and holding before him a large round shield, on which is the eight-rayed star; in the case of No. 6, the letters **ΕΙC**.

1. In f. to r., ΙΩ . Beneath horse, †Ι ΑΓΟΛΛΩ .	Taras, of plump Dionysiac type, astride, &c., l., holding distaff, and with r. hand extending bunch of grapes. In f. to r., ΑΝΘ or ΑΝ .
2. Same; but beneath horse, ΑΓΟΛΛΩ .	Same.
3. Same.	Same; but in f. to r., spray of laurel.
4. Same. Calabrian find. [Pl. VIII. 11.]	Same; but in f. to r. coiled serpent raising its head.
5. Same. Car. ex. 120.	Same; but in f. corn-spike.
6. Same; ΕΙC on shield. In f. to r., ΙΩ . No inscription visible beneath horse. [Pl. VIII. 12. <i>Bodleian Coll.</i> Wt. 100 grs.]	Same; in f. to r., ΑΝΘ . No symbol ^{ol} .

¹⁹⁵ The upper part of this figure of Taras presents an unmistakeable resemblance to that of his father Poseidôn, as he appears on the tetradrachms of Dêmétrios Poliorkêtês (306—283), the father of Antigonos Gonatas. Here again, as in the case of the copies of the Seleukid Apollo, we may detect a complimentary allusion to the assistance rendered by the Diadochi to Pyrrhus and Tarentum. This type of Taras was repeated on Tarentine coins of a later period.

VII. Type G.

Naked boy-rider crowning himself on horse standing l., and lifting up off fore-leg.

Obv.	Rev.
1. In f. to l., ΙΩ. Beneath horse, ΙΑ-ΛΟ and capital of Ionic column. Car. cxi. 145.	Taras, holding distaff, and with r. hand extending akrostolion. In f. to r., ΑΝΘ or ΑΝ.

VII. Type H.

Naked youth, cantering l.

1. In f. to r., EY. Beneath horse, ΙΩΠΥ. <i>B. M. Cat.</i>	Taras astride, &c., to l., holding palm bound with lemniskos, and with r. hand extending kantharos. In f. to r., a crested Corinthian helmet. In f. to l., ΘΙ. (Revival of V. D.).
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VII. Type K.

Naked youth, with both legs extended together, seated sideways on horse cantering l.

1. In f. to r. Ι. Beneath horse, ΙΩΠΥ. [Pl. XI. 12. Santangelo Coll.]	Same as H, l., but no lemniskos and no insc. ΘΙ.
2. Same. [Pl. XI. 13. Cab. des Médailles, No. 1480.]	Taras astride, &c., to l., holding distaff in l. hand, and with r. receiving wreath-bearing Victory. In f. to r. fillet and uncertain object.

VII. Type L.

Naked youth, cantering r., and holding out torch behind him.

1. Beneath horse, ΗΗΡΑ. [Pl. VIII. 13. Calabrian find.]	Taras astride, &c., holding in l. hand two lances, and with r. aiming a dart. A chlamys flows from his l. arm. In f. to l. Χ , below dolphin Ι and diôta.
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VII. Type M.

Naked boy-jockey galloping r., and holding torch behind him.

Obv.	Rev.
1. Beneath horse, ΦΗΡΑΚΛΗΙ. Car. cxi. 151. <i>B. M. Cat.</i> [Pl. VIII. 14.]	Same as K 1. Same monogram and symbol; but Α in place of Ι .

Amongst drachms belonging to the Pyrrhic Period may be specified the following:—

1. Head of Pallas r., with Scylla on helmet. Calabrian find. Car. cxv. 234.	Owl, seated sideways to r., on olive branch, with closed wings. In f. to l., NEYMHNIOΞ ; to r., ΑΡΙ . [Cf. VII. C 1 and 2. ΙΩ NEYMH, Α , elephant; and ΑΡΙΞ , two stars.]
2. Same. Car. cxv. 233.	Same type. In f. to l., NEYMHNIOΞ ; to r. ΠΟΛΥ . [Cf. VII. C 3. ΙΩ NEYMH , 2 stars.]
3. Same. Cab. des Médailles.	Same. [ΞΩ] ΞΤΡΑΤΟΞ ; to r. ΠΟΛΥ . In f. EY . [Cf. VII. A 3 EY ΞΩΞΤΡΑΤΟΞ—ΠΟΛΥ .]
4. Same; but on flap of helmet, Ι . <i>B. M. Cat.</i> 312.	Same; in f. to l., ΙΑΛΟ ; to r., ΑΝ . [Cf. VII. G 1, ΙΩ ΙΑΛΟ ΑΝ , or ΑΝΘ .]
5. Same; Ι on flap of helmet. A. J. E. Calabrian find.	Same; but owl to l. In f. to r., ΤΑΡΑΞ . In f. to l., Δ ; beneath owl, Α . [Cf. VII. F. ΙΩ ΑΡΟΛΛΩ ΑΝΘ .]
6. Head of Pallas in Scylla helmet to l., with hair flowing down behind. Beneath, sometimes, EY . Calabrian find. <i>B. M. Cat.</i> 317—321. Car. cxv. 222.	Owl seated on thunderbolt, with opening wings, the further only partly visible. In f. above, ΤΑΡΑΝΤΙΝΩΝ . In f. to r., Ω or ΑΝ ; beneath thunderbolt, ΔΙ or ΔΙΟ . [Cf. VII. A 2. Insc. ΓΥΞΩΞΤΡΑΤΟΞ and thunderbolt; and VII. A 1; inser. ΔΙ and elephant.]

Obv.	Rev.
7. Head of Pallas, as No. 1.	Owl seated, facing with expanded wings, both fully visible, on a serpent.
Car. cxv. 223; and cf. 224 (? ΦΙ for ΔΙ).	Above ΤΑΡΑΝΤΙΝΩΝ. In f. to r., $\Xi\Omega\Xi$ or $\Xi\Omega$; in f. to l. ΔΙ.

TARENTUM AS A *CIVITAS FÆDERATA*.

It is the currently received opinion that the Roman occupation of 272 B.C. put an end to the Tarentine coinage until at least the date of Hannibal's entry into the city, and the short space of revived independence under his protection between the years 212 and 207 B.C. But it may with good reason be urged that historic evidences weigh rather in the opposite scale. The first entry of the Romans into Tarentum was, in fact, very different from their recovery of the city in 207, after its defection to Hannibal. From the beginning of the Pyrrhic epoch it had been obvious that Rome could count on a friendly faction within the walls, and the philo-Roman element in Tarentum had been largely reinforced by the oppressive dominion exercised in the city by Pyrrhus himself, and at a later period by his Governor, Milôn. It was as the champion of the exiled Tarentines who, under their leader Nikôn, had ineffectually revolted against Pyrrhus' lieutenant, that the Consul Papirius appeared beneath the walls, and it was yielding to internal pressure that Milôn made terms with the Romans. Plundering took place no doubt; ships and arms were surrendered; statues and paintings graced Papirius' triumph; the walls were dismantled, and a Roman garrison succeeded the Epirote. But the well-being of Tarentum was so little impaired that two generations later, at the time of the second capture,

its riches were hardly inferior to those of Syracuse. The spoils carried off by Papirius were insignificant compared with what remained to adorn the later triumph of Q. Fabius. The walls were already repaired before the date of Hannibal's occupation, and in the first Punic War we find the Tarentines assisting the Romans with a squadron of their own. More than this, we are expressly told that the autonomy of the Tarentine Commonwealth was conceded. Tarentum remained a "Free and Allied City."¹⁹⁶

It is worth observing, moreover, in this connexion, that to Hêracleia, the colonial offshoot and intimate ally of Tarentum, the Romans granted terms of alliance so exceptionally favourable that Cicero¹⁹⁷ speaks of the treaty as "almost unique" in its character. The passage

¹⁹⁶ Zonaras, *Liv. Ep.* xv. Strabo says distinctly that it was only after the Hannibalic war that the Tarentines were deprived of their liberty (vi. 3, 4). There is indeed some colour for supposing that even after this date Tarentum, like Neapolis and Rhêgiôn, remained, in name at least, a *civitas fœderata*. Thus Antiochos, whom the Romans had accused of making Greek cities servile and tributary, is made by Livy (l. xxxv. 16) to retort through the mouth of his minister, "Qui enim magis Zmyrnæi Lampsacenique Græci sunt quam Neapolitani et Rhegini et Tarentini a quibus stipendium a quibus naves ex fœdere exigitis?" Sulpicius, while rejecting the parallel, lays stress on the uninterrupted character of the Roman claim to exact from Naples, Rhêgiôn, and Tarentum "quæ ex fœdere debent." In 193 B.C., therefore, there was still (if Livy is to be trusted) a treaty, though an unfavourable one.

¹⁹⁷ *Pro Balbo*, 22. "Quacum (sc. Heraclea) prope singulare fœdus Pyrrhi temporibus, C. Fabricio Consule, ictum putatur." It is true that this treaty was apparently concluded at a time when, in order to detach Hêracleia from Pyrrhus, it was necessary for Rome to bid high. But its terms may well have been held out as an incentive to Tarentine repentance. We may be sure at least that this exceptional *fœdus Heracleense* was not concluded without an eye to its effect on the mother-city.

of Polybios, in which he describes the Romans as "borrowing" the Tarentine ships during the second Punic War,¹⁹⁸ implies that in theory at least they were free agents; and it is noteworthy that on this occasion they are placed in the honourable company of the exceptionally free cities of Locri, Velia, and Neapolis. It is probable, indeed, that by the date of this contribution the condition of the Tarentines had considerably deteriorated from that which they enjoyed in the earlier period of the Roman alliance. There is, as we shall see, good evidence that the autonomous coinage of the city ceased about the year 228, and it is evident that by the time of the Hannibalic struggle the Roman yoke had become intolerable. But Tarentum was, even then, in name at least, a "Civitas Fœderata."

These historical considerations must be certainly taken to favour the assumption that the Roman occupation of 272 did not at once put an end to the autonomous coinage of Tarentum. That as a matter of fact this coinage did continue during the first period at least of the enforced alliance with Rome is, I venture to think, conclusively established by the evidence of another large find of over fifteen hundred Tarentine silver coins discovered at Taranto itself in 1883.

The greater part of this hoard was acquired by the Italian Government and is now in the Taranto Museum. Being at Taranto myself, however, shortly after the discovery, I was fortunate enough to obtain some three hundred coins, mostly didrachms, belonging to the same deposit, and by the careful examination of these was able

¹⁹⁸ Polybios, *Hist.* l. 20. "ἀλλὰ παρὰ Ταραντίνων καὶ Λοκρῶν ἐτι δὲ Ἑλεατῶν καὶ Νεαπολιτῶν συγχρησάμενοι πεντηκοντόρους καὶ τριήρεις. . ."

to obtain an intimate acquaintance with its character. Subsequently, by the courtesy of Professor Viola, the Director of the Museum at Taranto, who proposes to publish a report on the discovery in the *Notizie dei Scavi*, I was enabled to examine that part of the hoard which had passed into official hands, and owing to his kind collaboration, it has been possible for me to give an analysis of the whole hoard, including my own specimens, under Appendix C.

All the coins of this hoard belong to the reduced standard, but the Pyrrhic types are much worn and but sparsely represented, and, from a comparison of this with the preceding Calabrian find, it results that the coins contained in it belong, as a whole, to a distinctly later date. Thus it appears that out of one thousand and thirty-two didrachms from this hoard, no less than nine hundred and eighty belonged to types entirely unrepresented in the Calabrian deposit, a clear indication that the issues most abundantly represented in this second hoard belong to the post-Pyrrhic period of Tarentine history. From the variety and profusion of these new types it becomes evident that, so far from the Tarentine coinage breaking off with the Roman occupation, it continued for a very considerable period after that event.

The hoard itself, as will be seen from the analysis given under Appendix C, was by no means confined to didrachms. It contained an extensive series of litræ and hêmilitra, drachms, diobols, obols and hêmiobolia, the bulk of which, both from their condition and from the signatures and symbols that appear upon them, must have been issued during the same post-Pyrrhic epoch as the didrachms with which they are associated. In the summary tables of these coins of minor denominations given in

Appendix C, references are given to the didrachm types with which the letters and symbols that appear upon them bring them into connexion. From this it appears that in the case of the silver coins of less denomination than a drachm the letters as a rule refer not to the magistrate who on the didrachms and drachms signs in full, but to the more abbreviated signatures that in the larger coins occupy a secondary position in the field, and belong in all probability to the actual moneyer.¹⁹⁹ The symbols, on the other hand, seem to answer to the magistrates' names.²⁰⁰ It is noteworthy that diobols of the type presenting two horses' heads were absent from this find, though the corresponding obols with a single head occurred in sufficient abundance.

The only other mint represented in this find besides the Tarentine was that of Thurioi, of which city there occurred twenty-two didrachms of a late style and debased silver. Of these some of the most recent belonged to a rare and hitherto almost unknown type,²⁰¹ presenting on the ob-

¹⁹⁹ Thus the most abundant of the didrachm types of the Taranto find (VIII. A 9), reading **ΛΥΚΙΝΟΞ** on the obverse with **ΞΥ** in the field, and with an owl in the field on the reverse, answers to the litra (No. 2) and the diobol (No. 3), with **ΞΥ** and an owl; the next most abundant didrachm type (VIII. D 1), reading **ΑΡΙΞΤΟΚΛΗΞ** with **ΔΙ** in the field on the obverse, and a head of a nymph on the reverse, answers to the litra (No. 7) and the diobol (No. 8), with **ΔΙ** and the same symbol. The monogram **Α** of the didrachm (IX. D 1) signed **ΟΛΥΜΠΙΞ** recurs on litræ, hêmilitra, diobols, and obols.

²⁰⁰ Thus the anchor, on didrachms and drachms solely associated with the full-length signature **ΑΡΙΞΤΙΞ** (or **ΑΡΙCΤΙC**), is seen on the diobol, No. 15. The flower which appears on didrachms signed **ΉΡΑΚΛΗΤΟΞ Ε**, and on drachms with **ΉΡΑΚΛΗΤΟΞ**, occurs on the litra No. 6, associated with the monogram only, but from the analogy of the drachms must be taken to refer to *Hēraklêtos*.

²⁰¹ No example exists in the British Museum.

verse the laureate head of Apollo. The Taranto hoard stands out in marked contrast to the Calabrian find, from the complete absence of the coins of Hêrakteia, so brilliantly represented in the other deposit. It would thus appear that at the date when the present hoard was withdrawn from circulation, which, as we shall see, may be approximately fixed as 228 B.C., the Hêrakteians, in spite of their *singulare fœdus*, had ceased the issue of their silver coinage.

The later Tarentine didrachms, so fully represented in this find, show, for the most part, a marked falling off as compared with those of the Pyrrhic epoch. The earlier light-weight didrachms of Pyrrhus' time are distinguished from the succeeding class by their broad-spread character. It would seem, indeed, as if the moneyers had sought to render the reduction of the standard less patent by giving these issues a module if anything somewhat larger than that of the immediately preceding types of heavier weight. But the later didrachms, comprising the great majority of those represented in the Taranto find, show no longer this transitional trait. They are smaller for the most part, and of more careless workmanship.

It is only towards the close of this series that a marked reaction again sets in. In this great find, amongst hundreds of coins, alike of inferior fabric and preservation, there occurred a small but well-defined and brilliant group of didrachms, evidently fresh from the mint at the time the hoard was deposited, and displaying in their design and execution a marked contrast to the carelessly executed and monotonous designs of the preceding class.

The internal evidence supplied by this Taranto find thus enables us to divide the post-Pyrrhic issues of

Tarentum into an earlier and a later class, which I have therefore distributed into two corresponding Periods, VIII. and IX.

PERIOD VIII.—THE ROMAN ALLIANCE: I.

B.C. 272—C. 235.

In this Period, as already explained, I have comprised the types intermediate between those represented in the Calabrian hoard and that later group of coins which, from their exceptional preservation in the Taranto find, must have been but recently minted at the time of its deposit. It was of these intermediate types that the great bulk of the Taranto hoard itself was composed, and from the fact that they include among them over thirty varieties of coins, some of them ranking among the most abundant of the Tarentine issues, it becomes evident that the Period during which the present class was struck must have extended over a considerable space of years. If we allow for it a space of time proportionate to other well-represented classes of Tarentine coins, thirty-five years will hardly be considered an excessive estimate. Taking, then, the date 272 B.C. as our starting point, we may roughly fix the duration of the present Period as between that year and the approximate date of 235 B.C.

The abundance of these late types is a speaking proof that the enforced alliance with Rome had not, at least after the first excesses of the occupation, sensibly impaired the material prosperity of the Tarentines. Their condition was in all probability more flourishing than it had

been in the time of what Livy describes²⁰² as their "miserable servitude" under Pyrrhus' governor. The types and symbols of some of the didrachms of this Period supply us, indeed, with a remarkable piece of evidence tending to prove that the Tarentine commerce was still in a position to dominate some of the South Italian markets.

There exists a well-known class of Tarentine didrachms which both in their standard and type deviate from the ordinary issues. On these the type of Taras on his dolphin is replaced by a female head bearing a great resemblance to the Parthenopê or Dia Hêbê of the Neapolitan series. The weight is that of the Campanian didrachms, and reference has already been made to the view that these coins were a peculiar class of Tarentine didrachms based on the Campanian monetary system and intended for circulation in the Samnian, Apulian, and other border districts dominated by it. The superior execution of a few exceptional pieces affords some ground for supposing that the earliest of these Campano-Tarentine types may already have been issued during the years that preceded Pyrrhus' expedition. But, as already pointed out, the fabric of the generality of these coins points to a distinctly later date; and a minuter examination of the evidence at our disposal seems to me to be conclusive in establishing the fact that the great bulk of them belong to the post-Pyrrhic Epoch of the Tarentine coinage.

It has hitherto been generally assumed, in conformity with the convenient theory that the independent silver coinages of Southern Italy were extinguished by the first

²⁰² *Hist. lib. xxiii. 7.*

emission of the Roman denarius in 268, that both these Campano-Tarentine types and their Neapolitan counterparts ceased to be issued after that date. There seems in fact to be even less historical warrant for supposing that the Free and Allied City of Neapolis suppressed its silver coinage as soon as the first denarii issued from the temple of Juno Moneta than for supposing that four years before that event the Roman alliance had put an end to the mintage of Tarentum. That the same unexplained inscription $\text{I} \leq$ appears accompanying the same type both on a late class of Neapolitan didrachms and on bronze coins of Æsernia, all of which were certainly struck after 262 B.C., is a coincidence hard to explain on the assumption that the issue of the latest Neapolitan silver coins had ceased six years before that date. With regard, however, to the date of a whole series of types belonging to the Campano-Tarentine class, the ordinary Tarentine didrachms belonging to the Period with which we are dealing supply some valuable indications.

The horseman type as it appears on the bulk of these Campano-Tarentine coins is of a late and monotonous character. The scheme is that of the boy rider crowning a stationary horse which lifts up its off fore-leg, while beneath the horse is seen almost invariably a small dolphin. This type of horse and rider appears indeed at an earlier period of the Tarentine coinage, but in a very different style. We have no longer here the noble steeds with their curling manes of that earlier epoch, the gracefully posed boy riders with their flowing tresses, often crowned by a flying Victory. The curious androgynous form of a somewhat similar horseman type of the last period of the full-weight issues is also wanting on the present class, nor is it till after Pyrrhus' date that we discover any real

parallel in style and design to these Campano-Tarentine types in the ordinary didrachm series. It is only in Period VIII., that a wooden representation of horse and rider strikingly analogous to that on these latter coins becomes usual on the Tarentine dies, nor is it indeed till the beginning of the next Period that a coin appears (IX. F; Pl. X. 6) in the normal Tarentine series which not only reproduces this identical scheme of the horse and rider, but combines it with the dolphin below, thus affording an exact counterpart to the most typical of the Campano-Tarentine pieces. But this analogy, striking as it is, does not end here. The type of Period IX. referred to as presenting this identical design, and which shows together with the dolphin the signature **ΦΙΛΟΚΛΗC** beneath the horse, presents us on the reverse a figure of Taras on his dolphin holding out a rhyton, terminating in the protomê of an animal, one of the few symbols that appear on the Campano-Tarentine series. The same symbol in a similar conjunction occurs on another coin of the present Period signed **ΞΕΝΕΑΞ**, but it is otherwise unknown on the Tarentine dies.

Of the other symbols that appear on the Campano-Tarentine coins, one only, the dog²⁰³, is confined to that class. The Ionic capital occurs once, indeed, in Period V., but is otherwise confined to Periods VII. and VIII. The anchor and the tripod are seen as symbols in the field both on types of the latest Period (VI.) of the full-weight didrachm issues and on others of

²⁰³ Car. cviii. 98. It is possible, however, that this is only a misinterpretation of the doe, which occurs on a didrachm of Period VI. (F 1), signed **ΝΙΚΟΔΑΜΟΞ** - **ΙΟΡ** and on litræ of the same date.

Periods VIII. and IX.²⁰⁴ The single eight-rayed star occurs on a Pyrrhic type.²⁰⁵ In these cases we have an alternative connexion with the latest full-weight coinage of Tarentum, or the still later issues that date from the time of the Pyrrhic Hegemony or the Roman Alliance. For the remaining five symbols in the field, however, we have no such alternative. The only parallels that can be found to them on the regular didrachm series of Tarentum belong, as will be seen from the following table, exclusively to the post-Pyrrhic periods.

Lion passant	.	Period VIII.	[ΛΕΩΝ].
Bunch of grapes	.	„ VIII.	[ΨΙΣΤΙΑΡ(ΧΟΞ)].
Cornucopiæ	.	„ VIII.	[ΥΑΓΕΑΣ].
Wreath	.	„ IX.	[ΟΛΥΜΠΙΞ].
Crescent	.	„ IX.	[ΚΑΛΛΙΚΡΑΤΗΞ].

It thus appears that the type and symbols as well as the generally inferior execution of the Campano-Tarentine coins link them in a peculiar way to the post-Pyrrhic periods of the Tarentine mintage. This parallelism becomes the more significant when it is realised that, as in the case of the Hêrakleian Tables,²⁰⁶ many of the symbols that are found on Tarentine coins of the regular didrachm series belonging to these later Periods refer in fact to the magistrates whose signatures now appear at length beneath the horse on the obverse. That this is the case is rendered indeed almost certain by the remarkable coincidence of certain names and symbols. On one of the above

²⁰⁴ The tripod occurs as a symbol in the field on coins of Period VI., signed ΦΙΛΙΑΡΧΟΞ; of Period VIII., signed ΦΙΛΙΣΚΟΣ; and IX., ΟΛΥΜΠΙΞ; for the anchor, see Period VI., ΑΝΘΡΩΞ; and Period VIII., ΑΡΙΞΤΙΞ.

²⁰⁵ Signed ΘΕ ΑΛΕΞ.

²⁰⁶ See p. 25.

list the signature **ΛΕΩΝ** is coupled on the reverse with the *type parlant* of a lion passant. The reappearance of the same lion badge on the Campano-Tarentine piece must therefore be regarded as an indication that it was struck under the magistracy of the same Leôn. In the same way the signature **ΙΟΡ** beneath a symbol of a doe on type of Period VI., contains a probable allusion to **ΙΟΡΚΑΞ** a dialectic form of **ΔΟΡΚΑΞ**, a deer. A coin of Period VIII. exhibits a torch-racer coupled with the signature **ΔΑΙΜΑΧΟΞ**, a mere translation of the name,²⁰⁷ and **ΟΛΥΜΠΙΞ** with the wreath of an *Olympionika*. The rayed solar emblem on the shield of a horseman of Period VII., has in the same way a probable connexion with the name **ΑΓΓΟΛΛΩΝ[ΙΟΞ]** that appears below it, just as on the small gold piece of the Molossian Epoch we find the signature **ΑΓΓΟΛ** (probably an earlier Apollônios) associated with the radiated head of the Sun-God.²⁰⁸

Sometimes the fact that the symbol is connected with a special magistrate's name is brought out in other ways. The bunch of grapes, for instance, which appears on the reverse of a didrachm of Period VIII., cited above, bearing on its obverse the signatures **ΉΣΤΙΑΡ**, reappears on a contemporary drachm in direct association with the same name in its amplified form **ΉΞΤΙΑΡΧΟΞ**. The signature **ΑΠΙΞΤΙΞ** or **ΑΠΙCΤΙC** is in the same way doubly coupled with the anchor, and **ΑΠΙΞΤΟΚΡΑΤΗΞ** with a Term. Two allied types (G 1 and 2) of Period VIII., signed **ΉΗΡΑΚΛΗΤΟΞ**, afford, moreover, interesting

²⁰⁷ For the sense in which this is to be regarded as a *type parlant*, see p. 188, 189.

²⁰⁸ Several of the *types parlants*, adduced by Fiorilli (*Osservazioni sopra talune monete rare di città greche*, Naples, 1843), must, however, be rejected as too fanciful.

proof that the symbols held in Taras' hand should also be taken as occasionally containing a reference to the magistrate. On one of these Taras holds a flower in his hand while a *thymiatérion* appears in the field, on the other²⁰⁹ the flower is in the field and the *thymiatérion* in Taras' hand. On the corresponding drachm this flower, in which I have ventured to trace an allusion to the Hyakinthia,²¹⁰ is again associated with the name of Hêraklêtos.

These instances are sufficient to show that in many cases the symbols on these later didrachms contain a direct allusion to the names of the magistrates during whose period of office the types were issued. When, therefore, we find the same symbols as, for instance, the lion passant, the bunch of grapes, the wreath, and others re-appearing on the Campano-Tarentine series, we are warranted in tracing a reference to names of magistrates who sign in full on the regular didrachm types of the later Periods, and thus gain a new evidence as to the contemporaneity of the two classes.

The fact that, in the middle of the third century B.C., a class of Tarentine coins should have continued to be issued with an exclusive view to the markets dominated by the Campanian monetary system, affords conclusive proof that the Roman alliance was not incompatible with extensive commercial relations with other Italian districts, and in a principal degree with Apulia and Samnium. The affinity of the obverse type, as well as the weight, to the Neapolitan didrachms, points at the same time to the traditional intimacy between Naples and Tarentum, which had already manifested itself at an earlier date in the issue by the

²⁰⁹ Cf. Avellino, *Adnotationes in Carellii Tabulas*, p. 47.

²¹⁰ See p. 186, *seqq.*

Campanian city of small silver types of Tarentine and Hêrakleian character. At a time when Tarentum and Neapolis stood out as the chief remaining representatives of Hellenic life in Southern Italy, it was natural that they should have been drawn even more closely together, and it is by no means improbable that these Campano-Tarentine coins are the outcome of a definite monetary convention. That these pieces, in fact, formed part of a federal coinage is shown by the contemporaneous appearance at Teate in Apulia of some late didrachm types which, in both their obverse and reverse design, in their standard, and almost in their inscription, are identical with this Campano-Tarentine class.²¹¹

VIII. Type A.

Naked boy-jockey crowning horse, standing l. and lifting off fore-leg.

Obv.	Rev.
<p>1. Type described. Beneath horse, ΑΡΙΣΤΙΞ and anchor. Car. cx. 128. [Pl. IX. 1.]</p>	<p>Taras astride, &c., to l., holding distaff in l. hand, and with r. receiving small Victory, who reaches out a crown.</p>
<p>2. Same; but in f. to r., ΦΕΙ. Beneath horse, ΙΩΠΥΡΟΞ. Car. cxi. 146:</p>	<p>Same.</p>
<p>3. In f. to r., ΓΥ. Beneath horse, ΙΩΠΥΡΟΞ.</p>	<p>Same; but in f. to r., ΧΡΗ?</p>

²¹¹ See Sambon, *Monnaies de la Presqu'île Italique*, p. 218 (Pl. XV. 7). Garrucci, T. xcii. 1—3. On many of these Teatine coins the inscription is simply **TIA**; on the Campano-Tarentine, **TA**.



Period VIII. 272- c.235 B.C. The Roman Alliance I.

Obv.	Rev.
4. Inf. to r., cornucopiæ. Beneath horse, ΡΑΓΕΑΣ . A. J. E.	Taras astride, &c., to l., holding trident in l. hand, and with r. extending kantharos. In f. to r., ΡΟΛΥ .
5. Inf. to r., cornucopiæ. Beneath horse, ΦΙΛΩΤΑΣ . Car. <i>Descr.</i> 354.	Taras astride, &c., to l., holding trident in l. hand, and with r. extending kantharos. In f. to r., ΡΟΛΥ .
6. In f. to r., Κ Beneath horse, ΦΙ- ΛΟΚΡΑ . Car. cxiv. 206. [Pl. IX. 2.]	Same; but in f. to r., ΑΠΟΛ .
7. Same. Car. <i>Descr.</i> 348. A. J. E.	Same; but in f. to r., ΑΡΕΥ .
8. Same; but in f. to r., ΞΥ . In front of horse, ΔΕ ; and beneath, ΛΥΚΙ ΝΟΞ . Car. cxii. 165.	Taras astride, &c., to l., his back half turned towards the spectator, holding chlamys on his l. arm, and with his r. hand brandishing a trident in a Poseidonian pose (cf. VII. E 2). In f. to r., an owl.
9. Same type and inse., but without ΔΕ . [Pl. IX. 3.]	Same.
10. Same; but in f. to r., ΕΥ . Beneath horse, ΕΙΞΤΙΑΡ . Car. cxi. 157.	Taras astride, &c., to l., holding trident in l. hand, and with r. receiving small wreath-bearing Victory. In f. to r., bunch of grapes.
11. In f. to r., ΔΙ . Beneath horse, ΦΙΛΩ ΤΑC . Car. cxiv. 211.	Taras astride, &c., to l., holding in l. hand distaff, and with r. extending kantharos. In f. to r., cock.

VIII. Type B.

Naked boy-jockey crowning stationary horse, which lifts its off fore-leg. As Type A, but horse to r.

Obv.	Rev.
1. Beneath horse, ΑΓΑΘΑ ΡΧΟΞ. Car. cx. 116.	Taras astride, &c., to l., holding cornucopiæ in l. hand, and with r. extending kantharos. In f. to r., a lighted torch.
2. In f. to l., ΦΙ. Beneath horse, ΙΩΠΥΡΟΞ. Car. cxi. 147.	Taras astride, &c., to l., holding trident in l. hand, and with r. extending cornucopiæ. In f. to r., a cicada.
3. Beneath horse, ΛΕΩΝ. Car. cxii. 164. [Pl. IX. 4.]	Taras astride, &c., to l., holding trident in l. hand, and with r. extending bunch of grapes. In f. to r., Λ. Beneath dolphin, a lion passant.
4. In f. to l., Ρ. Beneath horse, bearded mask; under fore-leg, ΚΥ ΝΩΝ. Car. cxii. 162.	Taras astride, &c., resting his l. hand on dolphin's back and with r. extending kantharos.

VIII. Type C.

As B, but horse does not lift fore-leg.

1. In f. to l., ΕΥ. In front of horse, ΦΙ ; beneath, ΙΕΝΕΑΞ. A. J. E.	Taras astride, &c., to l., holding in l. hand trident, and with r. extending cornucopiæ. In f. to r., spike of corn.
2. In f. to l., ΦΙ- ΛΟΚΡΑ. Beneath horse, ΝΚ. A. J. E. Cf. Car. cx. 180, "ΠΑ ΝΚ."	Taras astride, &c., to l., holding in l. hand trident, and with r. receiving small wreath-bearing Victory. In f. to r., and below dolphin, ΑΡΙΞΤΟ.
3. Same. A. J. E.	Same; but in f. to r., ΑΠΟΛ.

VIII. Type D.

Naked horseman on prancing horse to r., lancing downwards. Behind him a large round shield and reserve of two lances.

Obv.	Rev.
1. In f. to l., Δ I. Beneath horse, ΑΡΙΣΤΟ ΚΛΗΞ . Car. cx. 131. [Pl. IX. 6.]	Taras astride, &c., to l., holding trident in l. hand, and with r. extending kantharos. In f. to r., head of nymph.
2. Same; in f. to l., A. Beneath horse, ΝΙΚΟ ΚΡΑΘΞ . Taranto find.	Taras astride, &c., to r., holding crested helmet between his hands. Below, Ionic capital.

VIII. Type E.

Boy-rider to r. on stationary horse, holding reins.

1. In f. to r., Γ I. Beneath horse, ΦΙΛΗΜΕΝΟΞ . Car. cxiv. 200. [Pl. IX. 7.]	Taras astride, &c., to l., holding trident in l. hand, and with r. extending tripod. In f. to r., bucranium.
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VIII. Type F.

Naked youth, raising his l. hand, and with drapery about his loins, on stationary horse to r.

1. Beneath horse, ΦΙΛΙΚΚΟC . Car. cxiv. 202. [Pl. IX. 8.]	Taras astride, &c., to l., holding trident in l. hand, and with r. extending kantharos. Beneath dolphin, a tripod.
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VIII. Type G.

Warrior in close-fitting lorica and crested helmet, holding in l. hand a lance, and with large round shield behind him, on horse standing r. and raising its off fore-leg.

1. Beneath horse, ΓΗΡΑ ΚΛΗΤΟΞ . Car. cxi. 152. [Pl. IX. 9.]	Taras astride, &c., to l., holding in l. hand cornucopiæ, and with r. extending flower. In f. to r., Θ and thymiatêrion.
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Obv.

2. In f. Φ I.

HHPA

KANTOΞ.

Mionnet, No. 406.

[Pl. XI. 14, Cab.
des Médailles, 1447.]

Rev.

Taras astride, &c., to l., holding in l. hand cornucopiæ, and with r. extending thymiatêrion. In f. a flower and monogram Θ .

VIII. Type H.

Warrior, as Type G, but on cantering horse to r.

1. In f. to l., Δ I.

Beneath horse,

ΑΡΟΛΛ

ΩΝΙΟΞ.

Car. ex. 121.

Taras astride, &c., to l., half turned towards the spectator, with chlamys caught round his l. arm and flowing behind him, holding in r. hand a trident, while a small Victory flies forward to crown him. Beneath, waves.

2. In f. to l., Θ I.

Beneath horse,

ΑΡΙΞΤΟΚ.

B. M. Cat. 250.

Cf. Car. ex. 122,

"ΑΡΟΛΛΩ."

[Pl. IX. 10. Taranto find.]

Same; but beneath dolphin, a rudder.

VIII. Type K.

Warrior in close-fitting thorax, raising r. hand behind him and galloping r.

1. Beneath horse,

HHPPOΔA.

Car. exi. 156.

Taras astride, &c., to l., holding in l. hand cornucopiæ, and with r. extending kantharos. In f. to r., Δ I and amphora.

VIII. Type L.

Naked boy-rider crowning horse standing, or walking, r., while a small Victory flies forward to crown the jockey from behind.

1. In front of horse,
 Φ I; beneath,

ΑΡΙΞΤΟ

ΚΡΑΤΗΞ.

Car. ex. 132.

[Pl. IX. 11.]

Taras astride, &c., to l., holding trident and kantharos. In f. to l., Γ I; to r., Term.

Obv.

2. In front of horse,
ΦΙ; beneath,

ΑΡΙΞΤΕΙΔ.

Car. ex. 124.

Rev.]

Taras astride, &c., to l., holding
trident and corn-spike. In f. to r., ΠΡ.

3. In front of horse,
ΕΥΝ; beneath,
ΔΑΜΟΚΡΙΤΟΞ.

Car. cxi. 140.

[Pl. IX. 12.]

Taras astride to r., holding cornu-
copiæ and trident. In f. to l., Ξ.

VIII. Type M.

Warrior in crested helmet and holding shield (seen sideways)
behind him, on horse standing l., and holding up fore-leg.

1. Ornamental
shield. In f. to l.,
ΕΥΦ in minute let-
ters. Beneath horse,
ΑΡΙΣΤΩΝ.

[Pl. IX. 13. A. J. E.]

Taras astride, &c., to l., holding
trident and hippocamp. In f. to r.,
ΙΩΓ.

2. Same; but plain
shield and ΕΥ.

B. M. Cat. 194.

Car. ex. 133,

"ΑΡΙΣΤΙΩΝ."

A. J. E.

Same.

VIII. Type N.

Naked horseman holding palm-branch, on horse advancing
to r.

1. To r., Ν. Be-
neath horse,

ΝΙΚΟΚ

ΡΑΤΗΞ.

B. M. Cat. 165.

[Pl. IX. 14.]

Taras astride, &c., to l., chlamys
flowing from his l. arm, and holding in
his r. hand a trident.

VIII. Type O.

The two Dioskuri, clad in mantles and peaked helmets,
cantering r. (The further horse is half a length ahead of
the other.)

Obv.	Rev.
1. Beneath horses, NIKYAOΞ . Car. cxii. 126. [Pl. IX. 5.]	Taras seated sideways on dolphin to l., holding trident in l. hand, and with r. extending kantharos. In f. to r., Α .

DRACHMS BELONGING TO PERIOD VIII.

1. Head of Pallas in Scylla helmet to r. Car. cxv. 230.	Owl seated to r. with closed wings on olive branch. In f. to l., APIΞ-ΤΟΚΡΑΤΗΞ ; to r., Term. [Cf. VIII. L 1, ΑΡΙΣΤΟΚΡΑΤΗΞ ΠΙ , Term.]
2. Same. Car. cxv. 231.	Same. Inf. to l., ΗΗΡΑΚΛΗΤΟΞ . A flower growing out of olive spray. [Cf. VIII. G 1 and 2, ΗΗΡΑΚΛΗΤΟΞ , flower.]
3. Same, Car. cxv. 232.	Same; but the owl is seated on a thunderbolt. In f. to l., ΗΞΤΙΑΡΧΟΣ ; to r., ΕΥ and bunch of grapes. [Cf. VIII. A 10, ΕΥ ΗΞΤΙΑΡ , bunch of grapes.]
4. Same. A. J. E.; (cf. Car. cxv. 225. No. inse.)	Same; but the owl is seated on an anchor. In f. to l., ΑΡΙCΤΙC ; to r., ΤΑ . [Cf. VIII. A 1, ΑΡΙΞΤΙΞ , anchor.]
5. Same. Car. cxv. 229.	Same; but the owl is seated on a bucranium. In f. to r., ΤΑΡ and ΛΕΩΝ . [Cf. VIII. B 3, ΛΕΩΝ , lion.]
6. Same. Car. cxv. 235. Cf. Descr. 400.	Same; but the owl is seated on an Ionic capital. In f. to l., ΝΙΚΟΚΡΑΤΗΞ ; to r., ΤΑΡ and ΑΝ . [Cf. VIII. D 2, ΝΙΚΟΚΡΑΤΗΞ Α , Ionic capital.]
7. Head of Pallas to l. Car. cxv.	Same; but owl seated to l. on thunderbolt. In f. to l., lighted torch; to r., ΤΑΡ . [Cf. VIII. B 1, ΑΓΑΘΑΡΧΟΞ , lighted torch.]

PERIOD IX.—THE ROMAN ALLIANCE : II.

c. 235—228 B.C.

The great Taranto find is peculiarly valuable from the light which it throws on a late and well-marked class of didrachm types, which, with the aid of the evidence thus supplied, I have no hesitation in grouping in a class by itself, and which must be regarded as the immediate successor of those of Period VIII. In this find, besides a great abundance of coins belonging to Period VIII., and presenting, for the most part, the appearance of having been some time in circulation, was a small and brilliant group, evidently fresh from the mint, and displaying in their design and execution, as well as their condition, a marked contrast to the carelessly-engraved and monotonous designs of the preceding Period. The most typical specimens of this more recent group which evidences a distinct revival of the monetary art at Tarentum, are characterized by the animated figures they present of galloping *hippakontists* and torch-racers, of boy-jockeys in wild career literally hanging on their horses' necks, of Taras with a leafy crown about his head turning round on the back of his marine charger, and raising his flowing mantle like a sail behind him—a scheme, perhaps, more strictly picturesque in its composition than any other in the long Tarentine series [Pl. X. 7]. They display, one and all, a careful minuteness in the engraving which, though over elaborate, is worthy of a better age, and it was not without reason that Raoul Rochette, in his well-known letter to the Duc de Luynes,²¹² was led to single out the small

²¹² *Lettre à M. le duc de Luynes sur les graveurs des Monnaies Grecques*, p. 45 and Pl. IV. 35. He describes the coin as "une des plus rares de Tarente."

letters $\xi\Omega$ seen between the horns of a bucranium on a coin of this group [IX. B, Pl. X. 2] as a clear example of an artist's signature on a Tarentine coin. As to the origin of this remarkable artistic revival on the Tarentine coinage at this late period, we must be content to remain in ignorance. In any case, it is a most remarkable phenomenon.

Notwithstanding the great superiority of this group of coins to the bulk of those issued during Period VIII., there can be no doubt that they belong to a later date. The evidence of the great Taranto find is by itself decisive on this head, and the character of the epigraphy exhibited by the present series points to the same conclusion. A complicated style of monogram now makes its appearance in the field quite unknown to the earlier coinage, though a tendency to it is perceptible in the preceding Period VIII. Types A, G, and H of this series present in particular highly elaborate combinations very different from the simple linking together of a couple of letters, such as **A** or **H** on earlier issues. In the forms of the letters themselves a decided change is perceptible, and the chevroned type of **A**, **•** for **O**, and **C** for ξ ,²¹³ now become frequent. A further indication of a late date is seen,

²¹³ The lunar form of ξ makes its first appearance on four amongst the forty varieties of coins (including seven drachms) belonging to Period VIII. (**APICTIC**, drachms only; **TAΓEAC**, **ΦΙΛΩΤAC**, **ΦΙΛICKOC**). In the present Period it occurs on five out of the ten varieties (**ΔΑΙΜΑΧOC**, **ΟΛΥΜΠIC**, drachms only; **APICTIGPOC**, **ΦΙΛOKΛHC**, **IEHOKPATHC**), and in two cases (A 1 and E 1) we find for the first time the form **TAPAC**. The lunar **C** makes its first isolated appearance on Rhodian coins of Alexandrine age. It only reached Sicily towards the end of the second century B.C. (See S. Reinach, *Traité d'Epigraphie Grecque*, p. 208.)

moreover, in the fact that Types C, D, and to a certain extent E, were copied in an inferior style at the time of the Hannibalic occupation.

Another feature to be observed in this class is the appearance of horsemen in full military costume. The thorax, in which a galloping hippakontist is clad, in Type C, with the signature **ΟΛΥΜΠΙΞ**, finds indeed its parallel in a horseman type of Period VIII., signed **ΗΗΡΑΚΛΗΤΟΞ**, but the scarce coin of the present group (Type H) signed **ΚΑΛΛΙΚΡΑΤΗΣ**, shows still greater elaboration of equipment. Upon it we see a bearded horseman completely uniformed in thorax and shoulder-pieces, and with his military mantle flowing behind him.

Besides the freshly-struck coins of the present class represented in the Taranto hoard, I have been able to add to it, on grounds of design, style, and signature, a few other rare types of Tarentine coins. The coin of this class with the galloping hippakontist, signed **ΟΛΥΜΠΙΞ**, finds its counterpart, so far as style and signature is concerned, in an almost unique piece of the same monetary magistrate in my own collection,²¹⁴ in which a naked youth appears on a stationary horse. The coin signed **ΞΕΝΟΚΡΑΤΗΣ**, bearing on its obverse the over-clad figure of a Dioskuros in tunic and mantle, and that already referred to with the name of **ΚΑΛΛΙΚΡΑΤΗΣ** display in a marked degree the characteristics of this late Period.

The horse-racing types, that now become so common on

²¹⁴ The only other example of this type that has come under my observation is in the Museo Nazionale at Naples (Fiorelli, *Catalogo, &c., Medagliere*, No. 1855), but without the monogram.

the Tarentine dies, certainly point to a great revival about this time of some religious celebration of an agonistic character, and a comparison of types and symbols seems to afford some clue as to the occasion of these equestrian contests. Reasons have been already given for connecting the hippic types of the Tarentine coinage with prevalent heroic cults of this city, in which Taras himself and Phalanthos, or those twin Lacedæmonian patrons, the Dioskuri, certainly participated. But amongst the local cults which Tarentum had inherited from its historic founder, the Amyklæan Phalanthos, one of the most ancient was that of Hyakinthos, or the Hyakinthian Apollo, whose tomb, originally perhaps one of the imposing prehistoric barrows still to be found in this old Sallentine region, occupied a conspicuous position outside the Têmenid gate.²¹⁵ There can be little doubt that, as the Duc de Luynes pointed out, one of the earliest incuse Tarentine coins representing a nude youthful figure holding a lyre under his left arm, and with his right raising a flower to his nostrils, refers to this Hyakinthian cult.²¹⁶ It

²¹⁵ It was from here that the pre-arranged fire-signal was given by Hannibal to the Tarentine conspirators within the walls (Polyb. *Reliquiæ*, lib. xiii. 80).


²¹⁶ *Annali dell Istituto di Corr. Archeologica*, VII., 337 seqq. The conclusion of the Duc de Luynes that the flower on these archaic Tarentine coins represents, in fact, the hyacinth of the local hero, receives striking corroboration from the observations of Panofka, who (*op. cit.*, p. 342 seqq., and *tav. d'aggiunta*, 1830, M. 3) publishes a vase representing on one side the Amyklæan Apollo, and on the other a youthful figure holding the same flower represented as growing from a bulb. On vases this flower appears in a specially agonistic connexion as offered by the judge to the Ephêbos who had carried off the prize either in lyrical or gymnastic contests, *v. Panofka loc. cit.* No symbol could better indicate the *Hyakinthia*. A frequent characteristic of the flower is the trefoil arrangement of

is not, however, till Period IX. that the same hyacinthine flower as is seen in the hands of the Apollo-like figure of the earliest coinage reappears as a Tarentine monetary symbol. It is found on two closely allied didrachm types, in the one case in the outstretched hand of Taras, in the other as a symbol in the field, and in both instances associated with the signature **HPAKΛHTOΞ**. On a drachm of the same Period it again appears coupled with the same signature. There can be little doubt that this Hêraklêtos whose name is thus markedly associated with the flower symbol of Apollo is the same monetary magistrate who signs **HHPA** and **HPAKΛHI** on two of the latest pieces of the Pyrrhic Period, which have a special bearing on our present subject, as for the first time presenting us with the type of the torch-racer, and at the same time supplying the prototype of the coin of the present Period with the same device signed **ΔAIMAXOC**.

That the first appearance of the most characteristic of the horse-racing types of the later Tarentine series and the revival of the Hyacinthian symbol on the Tarentine coinage should connect themselves thus with the same name, is a fact of considerable significance, and leads to the conclusion that this Hêraklêtos, who seems to have held office at Tarentum about the time of the Roman occupation in 272, and again during the first period of the Roman alliance, was in some way associated with the re-

the leaves, which, as well as the veined petals on which were read the Υ of $\Upsilon\acute{\alpha}\kappa\upsilon\nu\theta\omicron\varsigma$ and the **AI AI** of his mourners (cf. Pliny xxi. 11, Mosch. *Idyll* III. v. 6) suggests a flower of the iris kind. In its origin this Chthonic flower-cult had, no doubt, a wider and more general sepulchral application, and the flower itself is only a Greek transformation of the lotus seen in the hands of the heroized departed, as, for instance, on the Harpy tomb at Xanthos, in Lykia.

vival or special institution of an agonistic festival in honour of the Hyakinthian Apollo. That horse-races formed a leading feature of the Hyakinthia is well known, and it was apparently during a contest of this kind at Amyklæ that Phalanthos, according to the legend, had planned to put on his cap as the signal for the Parthenian rising.²¹⁷ The Chthonic and funereal side of the cult of Apollo, as assimilated to Hyakinthos, so different from the wonted aspect of the Light God's festival, sufficiently explains the prominence which the torch-race, or lampadêdromia, seems to have had in this Tarentine celebration.

These conclusions lead us to the elucidation of a singular point. The coin belonging to the short period, with which we are at present concerned, exhibiting the type of the torch-racer, has been cited as an example of a *type parlant*, the signature ΔΑΙΜΑΧΟC below standing apparently in obvious relation to the torch or δαίς in the rider's hand.²¹⁸ But it has been shown that the type of the torch-racer already appears at a distinctly earlier date associated with the signatures ΞΗΡΑ and ΞΗΡΑΚΑΗΙ. The obverse of the coin signed ΔΑΙΜΑΧΟC is simply a careful revival at a later date of the piece struck about the time of the Roman occupation with the signature of Ηêρακλêτος. It is evident, therefore, that in its origin at least this type cannot have been originally due to a play on the personal name of Daïmachos. But the large monogram,  for ΞΗΡΑ, which appears in the field of the later coin, affords at least a probable solution of the enigma. It looks as if in this case we had to do with a patronymic, and that Daïmachos

²¹⁷ Strabo, *Geogr.* vi. 3.

²¹⁸ See Avellino, *Ital. Vet. Num.* T. 1, p. 88; Suppl., p. 36. Cavedoni in Carolli, *op. cit.* p. 48.

may himself have stood in a filial relation to Hêraklêtos. If, as we have good reason to believe, this magistrate took an active part in an agonistic revival, of which torch-racing was a feature, he might have called his son ΔΑΙΜΑΧΟΣ, for the same reason that he placed a δαϊμάχος on his own coins. Daïmachos himself in this case chose a type which had supplied the religious occasion of his own name-giving. This is a *type parlant* with a difference.

The spirited series of types that characterize the present Period show that it was at this time, and perhaps owing to the family traditions of the magistrate above-named, that the agonistic revival already indicated reached its height. And that this revival, as commemorated for us by these Tarentine coin-types, was in fact connected with the cult of Apollo receives a remarkable confirmation from an unexpected quarter. These late Tarentine types of the horseman at full gallop, holding a torch or clinging to his horse's neck, or the kindred design, in which the boy-rider holds a palm with a fillet or lemniskos attached, served, in fact, as the prototypes of a well-known series of Roman denarii belonging to the Calpurnian family. In this later Roman series, in which the figures of the galloping torch-racers are specially prominent, the contests represented are connected in the most unmistakeable way with the cult of Apollo, whose head is represented on the obverse side of the coins. The historic event commemorated on these Calpurnian types is indeed well known.²¹⁹ After the battle of Cannæ attention was called to the prophetic lays of the Seer Marcius, who had foretold the disaster, and had warned the Romans that if they wished to expel the enemy from their territory they should insti-

²¹⁹ Eckhel, *Doctrina Numorum*, II. 158.

tute annual games in honour of Apollo, to be celebrated "according to the Greek rite." The "Ludi Apollinares," first held in obedience to this sibyllic warning in 212 B.C., were in the succeeding year made perpetual on the motion of the Prætor Calpurnius, upon whom, in virtue of his office, the superintendence of the ceremony had devolved.²²⁰ If the Prætor to whom the organization of these games was due is to be identified with the Calpurnius who was taken prisoner at Cannæ in 216, he may himself, while serving in Southern Italy, have been a witness to the agonistic revival at Tarentum, of which the didrachms before us afford such striking evidence. The types of the Roman denarii struck by L. Calpurnius Piso Frugi in 89 B.C., and again by the later C. Calpurnius Piso in 64, show at least that the "Ludi Apollinares" as celebrated in Rome "according to the Greek rite" were framed on a Tarentine model. The dolphin which appears beside Apollo's head on some of these Calpurnian pieces may point in the same direction, and the flower, which also occurs in the same juxtaposition, as well as the prominence given to the lampadêdromoi, or δαϊμάχοι, seems to show that the Chthonic and Hyakinthian aspects of the Tarentine cult were not without their influence on the Roman celebration. This parallel is further borne out by some denarii of the Gens Marcia, commemorating the part played by the Seer Marcius in introducing the same games at Rome. On these is seen another agonistic type, that of the *desultor*, or ἀμφιππος, leading a second horse,²²¹ a representation, which though it does not occur on the didrachms of this Period, still finds its nearest

²²⁰ Cf. Livy, xxv. 12, and xxvi. 23; Macrobius, *Saturnal.*, I. 17.

²²¹ This type also occurs on coins of the Sepullia family.

parallel on a Tarentine coin. Thus, together with the importation of this Hellenic festival, the old traditions of the turf, which the Tarentines themselves had in great part derived from the horse-loving Iapygian and Messapian indigenes, were transferred to Roman soil.

The conclusion arrived at from the internal evidence supplied by the present group of Tarentine coins, that a great agonistic revival had lately taken place in honour of the local Apollo, which reached its height soon after the approximate date of 235 B.C., fits in well so far as chronology is concerned with the introduction at Rome in 212 of the "Ludi Apollinares," after a Tarentine model. The enthusiasm of which these highly animated Tarentine types are the abiding record, seems to have infected its Roman observers, and in view of the interesting numismatic parallels before us, we may be allowed to trace the first appearance of these games at Rome, more than to the fortuitously discovered verses of the Seer Marcius, to the contagious example of the great Greek city of the South.

The comparative rarity of the types of the class with which we are dealing forbids us to suppose that their issue extended over any length of time. There are, moreover, special considerations which make it improbable that any didrachms of the present standard were struck after the year 228. Between the coins of this Period and the latest class of Tarentine coins which seem to have been issued during the time of the Hannibalic occupation, there is a break in style and a break in standard, best explicable on the supposition that for a short period at least the Tarentine coinage itself had broken off.

Of this interruption of the autonomous mintage of Tarentum, we have in fact direct evidence in a hoard of

coins discovered in 1880 at a spot called Pizzone, at Taranto.²²² This find consisted entirely of Roman *Victoriati* of full weight, averaging about 3.30 grammes, and its deposit was therefore not later than 217, the date of the reduction of weight of *Victoriatus* to 2.92 grammes in conformity with that of the reduced denarius. It follows then that already before that date the native Tarentine coinage must have been superseded by the new international currency of Rome.

The occasion of this monetary revolution at Tarentum may with great probability be sought in the events of the year 228 B.C. Rome had about this time adopted as a convenient medium of external exchange the originally Capuan *Victoriatus*, being the half of the old Phocæo-Campanian stater as harmonized with the Roman metric system by its reduction to three scruples.²²³ But the rise of the Illyrian maritime power, which might at any time become still more formidable as an instrument in Macedonian hands, the fall of Corcyra and the siege of Epidamnus or Dyrrhachium, had led the Romans to secure a firmer foothold on the shores of the Adriatic and Ionian seas. The successful campaign of 229 against the Illyrian pirate state, and the establishment of a Roman protectorate over Dyrrhachium, Apollonia, and Corcyra, brought with them monetary arrangements, the chief object of which was to secure the wider extension of the

²²² This find was described by Prof. de Petra in a communication to the Accademia Pontaniana of Naples, September 2nd, 1881. A summary account of it, with de Petra's conclusions, is given by Prof. Viola, *Notizie dei Scavi*, 1881, p. 408 *seqq.*

²²³ For the Campanian origin of the *Victoriatus*, see M. Zobel's remarks in the Duc de Blacas' translation of Mommsen's *History of the Roman Coinage*, II. 104.

newly adopted Victoriæ currency. The two Illyrian cities, admitted to the Roman connexion on terms of freedom and alliance, henceforth begin to coin their well-known drachms on the Victoriæ standard, and the Corcyræans followed the same example.

But while these extra-Italian dependencies were allowed to adapt their indigenous coinages to the Roman system, there is evidence that within the limits of Italy itself Rome seized every occasion of imposing, at least so far as the silver currency was concerned, her own official issues, so much so that shortly after this date Roman *Victoriati* began to be struck at Krotôn, Luceria, and other cities of Southern Italy.²²⁴ What the immediate pretext may have been for depriving the Tarentines of their right of coinage we do not know, but we have good reason for believing that before the outbreak of the second Punic War the Romans had laid a heavier hand on Tarentine liberties. On the eve of the final struggle against the Carthaginians there was less room for those milder considerations of policy, such as seemed to have prevailed during the earlier period of the enforced alliance of Tarentum with Rome. In

²²⁴ A *Victoriat*, with the mint-mark **CROT**, in the Blacas Collection (Blacas, *op. cit.* iv. p. 30) weighs 3.49 grammes, and was therefore struck before 217 B.C. Lucerian *Victoriati* of the full weight are also found. The Victoriæ Mint, established in Corcyra, seems to have been late, as the monogram of Agêsandros which occurs on its issues is common to quinarii from the same mint, and must therefore have been struck about 104 B.C. Mommsen (*op. cit.* ii. 98) assumes that the Romans immediately after their occupation of Corcyra in 229 suppressed the native silver coinage, and established a Victoriæ mint of their own. But there can be no doubt that the autonomous silver coinage of Corcyra continued to a much later date (see Gardner, *B. M. Cat., Thessaly to Epirus*, p. xix. and 135 *seqq.*), though the standard adopted was partly at least that of the Roman *Victoriat*.

view of a possible diversion on the Macedonian side it was moreover specially necessary to secure a firm hold on the city which as past history had shown was the first objective of hostile enterprise from the Epirote shore. When the Tarentines turned to Hannibal for deliverance the Free City had already been practically reduced to the position of a Roman garrison town.

IX. Type A.

Naked youth at full gallop to l.; holding torch behind him.

Obv.
1. In f. to l., **ΛΡ**.
Beneath horse,
ΔΑΙΜΑΧ●C.
Car. cxi. 187.
[Pl. X. 1.]

Rev.
Taras astride, &c., to l., holding trident in l. hand, and with r. extending kantharos. In f. to r., **Α**. Beneath,
ΤΑΡΑC.

IX. Type B.

Boy-jockey, clad in short tunic, at full gallop to r.; his body is thrown back, and with his l. hand he seems to cling to the horse's mane.

1. Beneath horse,
ΙΩΠΥΡΙΩΝ and
bucranium, between
the horns of which
in minute letters, **ΞΩ**.
Car. cx. 129.
("ΑΡΙΞΤΙΩΝ.")
B. M. Cat. 189.
[Pl. X. 2.]

Taras astride, &c., to l., holding trident in l. hand, and with r. extending hippocamp. In f. to r., head of bearded Pan seen sideways, and **Ε**.

IX. Type C.

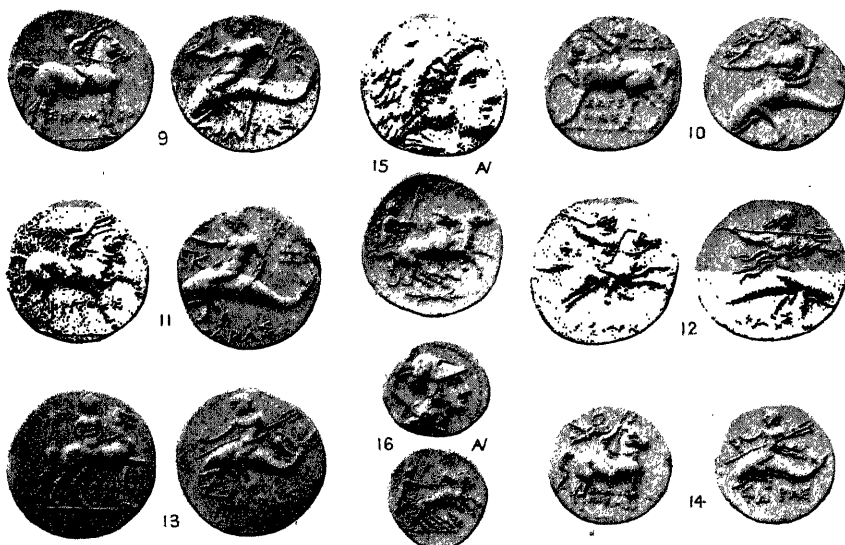
Hippakontist in close-fitting thorax galloping r., and hurling short javelin.

1. In f. to l.,
wreath. Beneath
horse, **ΟΛΥΜΠΙΞ**.
Car. cxiii. 181.
[Pl. X. 3.]

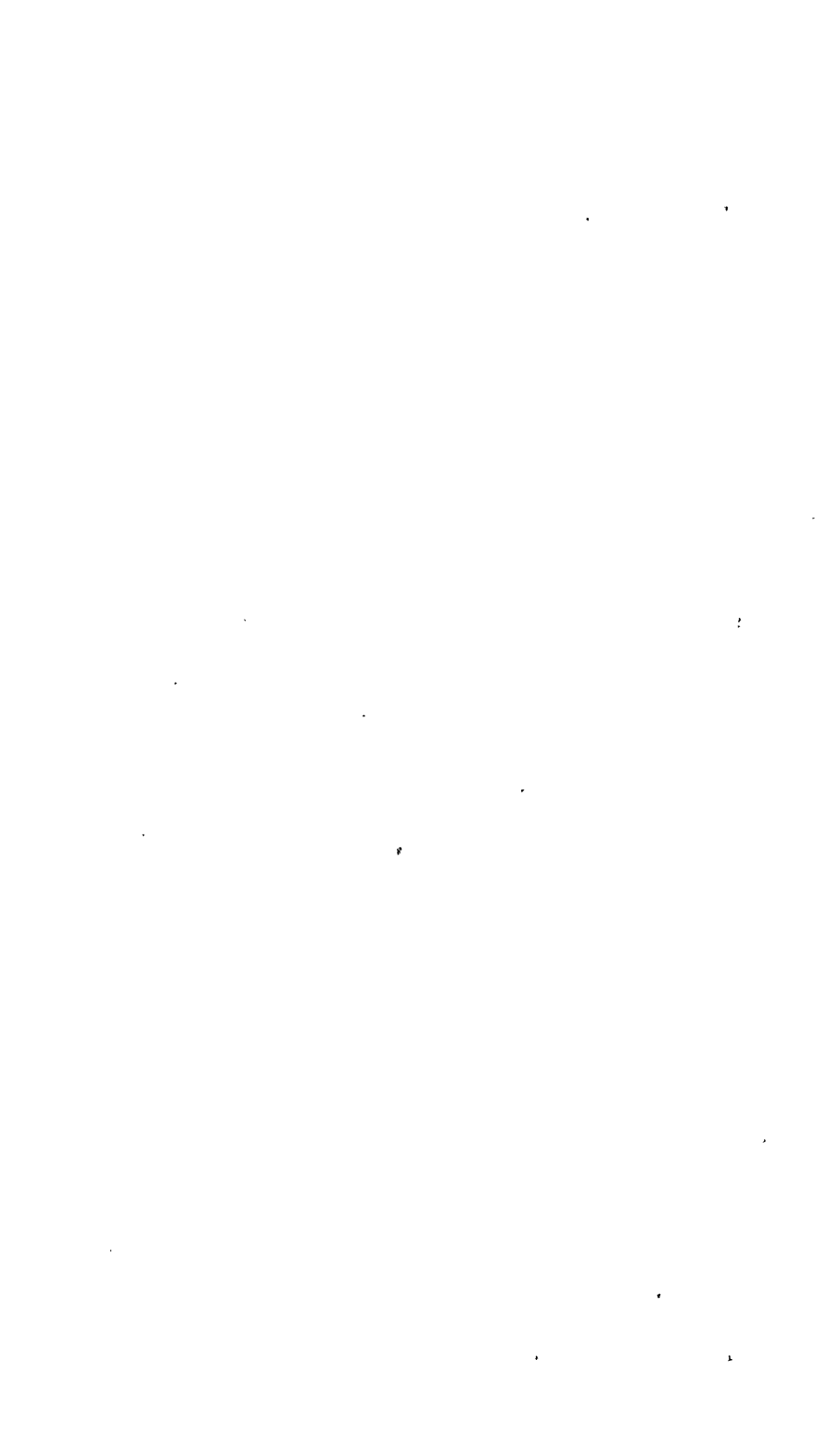
Taras astride, &c., to l., holding in l. hand cornucopiæ, and with r. extending kantharos. In f. to r., tripod. Beneath,
ΤΑΡΑΣ.



Period IX. 235-228 B.C. The Roman Alliance II.



Period X. 212-209 B.C. Hannibalic Occupation.



IX. Type D.

Naked boy-jockey to r., crowning stationary horse.

Obv.

1. In f. to l., Amazonian shield. In front of horse Λ . Beneath horse, **ΟΛΥΜΠΙΞ**.

[Pl. X. 4. A. J. E.]

Rev.

Taras astride, &c., holding trident in l. hand, and with r. extending rhyton terminating in protomê of a horse. Beneath dolphin, a cuttlefish.

IX. Type E.

Naked boy-jockey, holding palm bound with fillet, cantering r.

1. In f. to l., \mathcal{A} . Beneath horse,

ΑΡΙΣΤΙΓΓΟΣ.

Cf. Car. ix. x. 125.

[Pl. X. 5.]

Taras astride, &c., to l., crowned with a wreath. He rests his l. hand on the dolphin's back, and with r. extends a kantharos. In f. to r., Υ . Beneath dolphin, **ΤΑΡΑΣ**.

IX. Type F.

Naked boy-rider to r., crowning stationary horse, which lifts up its off fore-leg.

1. In f. to l., Ψ . In f. to r., \mathcal{A} . Beneath horse, **ΦΙΛΟΚΛΗΣ** and small dolphin.

Car. exiv. 204.

[Pl. X. 6.]

Taras astride, &c., to l., his left leg drawn back, his l. hand resting on dolphin's back and holding trident, his r. extending rhyton, terminating in protomê of an animal. In f. to r., two amphoras.

IX. Type G.

Single figure of a Dioskuros in short tunic and chlamys, raising further arm. The horse stands l., and raises off fore-leg.

1. In f. to r., \mathcal{K} , and pileus. Beneath horse, **ΙΕΝΟΚ ΠΑΤΗΣ**.

Car. cxiii. 180.

[Pl. X. 7.]

Taras with a leafy crown on his head turning round on dolphin, with left hand raising his chlamys, and with r. holding trident, which rests on his shoulder. Beneath dolphin, cuttlefish, and waves. In f. to r., \mathcal{X} .

IX. Type H.

Warrior bareheaded to r., in full military costume, with tunic, thorax, shoulder-pieces, and mantle, on horse cantering r. He turns his face to the spectator, and holds out his right hand behind him to receive small wreath-bearing Victory.

Obv.
1. In f. to l. $\overline{\epsilon}\kappa$ and crescent. Beneath horse, **ΚΑΛΛΙΚΡΑ-ΤΗΞ**.

Car. T. cxii. 158.
B. M. 277.

[Pl. X. 8.]

2. Same, without the crescent. Mon. $\overline{\epsilon}\kappa$
B. M. 276.

Rev.
Taras astride, &c., to l., holding trident in l. hand, and extending r. to receive small wreath-bearing Victory. In f. to l., **NE**.

Same.

To Period IX. must be referred the following drachms:—

1. Head of Pallas in Scylla helmet to r., **K** on flap.
[B. M. Cat. 315; Sambon, *op. cit.*, Pl. XVIII. 27.]

2. Same.
Taranto find.

3. Head of Pallas, three-quarters facing, in triple-crested helmet. To l. **PK**.
Car. cxv. 236.

Owl seated to r., with closed wings, on an olive spray.

In f. to l. **ΟΛΥΜΠΙΣ**, to r. **Α**.
[Cf. IX. D 1, **ΟΛΥΜΠΙΣ**, **Α**.]

Same; but in f. to r., wreath.

Owl as No. 1; uncertain inscription. [? cf. Mon. **KP** on IX. A. The form here is variant, but the character of the monogram answers best to the di-drachms of this late period.]

PERIOD X.—THE HANNIBALIC OCCUPATION.

c. 212—209 B.C.

The remarkable class of coins with which we have now to deal stands apart both in standard and fabric from all

other Tarentine issues. The traditional didrachm type is preserved, but the full weight of the highest denomination of coin now issued, 3.46 grammes ($53\frac{1}{2}$ grs.), is less than half that of the earlier full-weight didrachms of 7.90 grammes (122 grs.), and at the same time nearly three grammes lower than the average weight of the reduced coinage belonging to the post-Pyrrhic Periods that immediately precede them in date. Sambon²²⁵ regarded these coins as representing the drachms of the Tarentine series before the reduction of the didrachm standard, but though their weight possibly admits of such a conclusion, their fabric and the types that they represent are absolutely fatal to it. Mr. Head, who rightly recognised their late date, was misled, perhaps by an error of Carelli, into believing that didrachms of full-weight existed belonging to this class.²²⁶ Such, however, are not forthcoming.

On the other hand, the type itself is that hitherto almost exclusively set apart for the Tarentine didrachms. But it has been already shown that from about the year 228 onwards there was a break in the Tarentine coinage, and it need hardly surprise us therefore that, when a brief

²²⁵ *Recherches sur les anciennes Monnaies de l'Italie Méridionale*, p. 118.

²²⁶ *Historia Numorum*, p. 54. The usually accurate Carelli (Monnaies de Pl. CXIII. two coins of different denominations, with the legend, $\Xi \Omega \text{KPATH} \Xi$). The first (No. 196) seems to be a didrachm of full weight, belonging to Period VI. The legend on the second, however, is simply a misreading for $\Xi \Omega \text{KANNA} \Xi$ of the present Period; and by a further erroneous interpretation of the design, the palm-branch and fillet in the horseman's hand is converted into a laurel-branch, similar to that held by Taras on another full-weight didrachm described under Period VI., also with the legend, $\Xi \Omega \text{KPATH} \Xi$ (Car. cx. 135, without the inscription). Such an erroneous engraving is therefore fertile in confusion.

return of more favourable circumstances gave occasion for a temporary revival of the coinage, the standard of the new issue should present an abrupt contrast to that of the preceding class.

The view expressed in the *Historia Numorum* that the present class of coins belongs to the Hannibalic period of Tarentine history, is entirely corroborated by my own researches. The previous interruption of the Tarentine mintage is naturally accounted for by the tightening of the Roman hold on the eve of the final struggle against Carthage. The nominally free city lived under martial law imposed upon her by her too powerful ally. Under such circumstances the Carthaginian appeared as a deliverer, and the Tarentines, in virtue of the favourable convention concluded with Hannibal,²²⁷ gained a new lease of their civic liberties, which had been reduced to a dead letter by the suspicious tyranny of Roman commandants. That the privilege of striking their own coins was now exercised once more can hardly be doubted.

The past period of depression, however, had inevitably left its mark. The circumstances of the times had changed, and it would be useless to expect that the standard of the new coinage should come up to that observed in the earlier issues from Pyrrhus's time onwards. The desperate finan-

²²⁷ Livy, xxv. 8. "Congressi cum Hannibale rursus fide sanxerunt liberos Tarantinos leges suas suaque omnia habituros neque ullum vectigal Pœno pensuros præsidiumve invitos recepturos." Polybius, *Rel. Lib.* viii. c. 27, "Ταραντίνους ἐλευθερώσειν καὶ μήτε φόρους πράξασθαι κατὰ μηδένα τρόπον μήτ' ἄλλο μηδὲν ἐπιτάξειν Ταραντίνους Καρχηδονίους." The suppression of the native coinage was no doubt enumerated amongst the "πολλὰς καὶ ποικίλας κατηγορίας" made against the Romans by the Tarentine conspirators in their interview with Hannibal (Polybius, l. viii. c. 26).

cial expedients to which Rome herself had been reduced by the stress of the Hannibalic war had revolutionized the conditions of the Italian money-markets. In 217 the value of the originally libral As, which had already in practice fallen to two ounces, was reduced in virtue of the *Lex Flaminia* to a single ounce. At the same time the weight of the Roman denarius had fallen from about 4.55 grammes to 3.90,²²⁸ and that of the Victoriatus to 2.92. Tarentine commerce must have felt the full effect of this depreciation, since, as already remarked in the preceding section, the find of early Victoriati within the ancient walls of Tarentum tends to show that these Romano-Capuan coins had by this time entirely displaced the native Tarentine.

It does not seem, however, that the new Tarentine coinage had any direct relation to the Roman currency which it temporarily displaced. The average weight of seven Tarentine pieces of the present class of which I have a personal knowledge is 3.46 grammes. As compared with the contemporary Victoriatus, which since 217 had fallen to 2.92 grammes, this indicates a very considerable rise in the weight of the principal monetary unit. The weight, however, is still too low to be confounded with that of the reduced denarius of 3.90 grammes.

It is clear, however, that in the interests of their prospective commerce, the Tarentines when adopting a new standard for their staters, must have endeavoured as far as possible to conform to one or other of the monetary

²²⁸ Mommsen, *op. cit.* (ed. Blacas, ii. 22 and 77), who, while admitting his inability to decide whether the reduction of the denarius weight had been gradual or the result of a special law, points out that the reduced weight becomes permanent about the year 217 B.C.

systems then in vogue. And as a matter of fact the weight of the Tarentine coins of the present class presents a striking conformity with that of the pieces struck on the old Victoriatus system as it still existed in the great Illyrian staples of the opposite Adriatic shore. When in 228 B.C., after the first Illyrian war, Dyrrhachium and Apollonia entered into perpetual alliance with Rome, it was found possible in their new drachm coinage to harmonize their traditional monetary system with the new Victoriatus currency of Rome. The average weight of the earliest class of Dyrrhachian and Apolloniate drachms now issued, about 3.47 grammes,²²⁹ not only agrees with that of the early Victoriatus of three Roman scruples, but represents, nearly enough, a third of the old Corinthian tridrachms²³⁰ of the same cities, the issue of which had for some time been discontinued, but which still no doubt formed the norm of official reckoning.

It will be seen that this system reconciled in a singularly felicitous manner the old traditions of Illyrian commerce with the new unit of calculation which was gaining such rapid vogue not only throughout Italy but in the Gaulish and Spanish staples of the far West. East of the Adriatic it was by no means confined to Dyrrhachium and Apollonia. It was shared, as we have seen, by Corcyra, and found

²²⁹ Mommsen, *op. cit.* (ed. Blacas, ii. 91). "Les pièces dont le style et les légendes moins complètes prouvent une plus grande ancienneté (Mionnet, T. ii. p. 43, du No. 148 au No. 152) sont les plus fortes : elles pèsent 3 gr. 52 (= 66½), 3 gr. 48 (= 65½, trois exemplaires), 3 gr. 40 (= 64)." A well-preserved Dyrrhachian piece, of a slightly later type, with the names **ΑΑΚΑΙΟΞ** and **ΑΠΙΞΤΗΝΟΞ**, which occurred in the Selci find, deposited c. 190 B.C., weighed 3 gr. 42. (See *Num. Chron.*, 1880, p. 272.)

²³⁰ Their weight is c. 11 grammes 14; and the full weight of the corresponding drachm would have been c. 3 gr. 71.

besides a wide extension throughout Epirus and Thessaly. The Dyrrhachian and Apolloniate drachms were, however, especially abundant, and their acceptance by Rome indifferently with its own Victoriati as a medium of exchange ²³¹ is a tribute to the commercial prosperity at this time enjoyed by the two Illyrian cities. Their monetary system, indeed, though adopted under Roman influence, had such independent vitality that, when Rome herself fell away from the original Victoriati standard, Dyrrhachium and Apollonia continued to uphold it for long with scarcely appreciable diminution. East of the Adriatic and far away to the Dacian gold-fields, these Illyrian drachms, and not their depreciated Roman representatives, continued for over a hundred years to be the principal medium of exchange. Nothing under the circumstances was more natural than for the Tarentines to revert to the old Victoriati system as still preserved by their commercial neighbours of Illyricum, and as a matter of fact the average weight of the early Illyrian drachms is practically identical with that of the Tarentine pieces of the present class.

The reproduction by the Tarentines of their old monetary types, both on the obverse and reverse of these late pieces, shows that they were still intended to represent the earlier silver staters of the city, although their weight had now sunk to that of contemporary drachms. As if, indeed, to emphasize the fact that the new coin was still regarded

²³¹ This seems to be the reasonable interpretation of Pliny's confused statement, xxxiii. 3, 46, in which he mixes up the later quinarius with the original Victoriatus, and confounds the latter with the Illyrian drachms. "Qui nunc Victoriatus appellatur lege Clodia percussus est. Antea enim hic nummus ex Illyrico advectus mercis loco habebatur."

as the legitimate representative of the Tarentine silver stater, one magistrate, Sôkannas, struck a half, weighing about 1·70 grammes. It presents the same obverse and reverse types as the larger piece, an unusual but not altogether unexampled repetition. On the other hand, halves of the usual kind, such as are still found in the preceding Period, with the head of Pallas on the obverse and her owl on the reverse, are at this time wholly wanting; another proof of the break of continuity in the Tarentine coinage.

The types of the coins with which we are dealing themselves afford certain evidence that many of them belong to a later date than the issues of Period IX. The remarkable piece (Type D, Pl. X. 12) signed $\Phi\Lambda\Lambda\text{IAPXO}\xi$, now for the first time published, presents us with the obverse device of the galloping hippakontist, which, except that in this instance the warrior is bearded, is simply an inferior copy of the coin with the same type signed $\text{O}\Lambda\text{Y}\text{M}\text{P}\text{I}\xi$, of Period IX. Another piece of that Period, in which the same signature is associated with a standing horse, has, in like manner, served as prototype both in the obverse and reverse design for a coin of this inferior standard, signed by $\xi\text{HPAMBO}\xi$ (Type A; Pl. X. 9). The coin signed $\xi\text{O}\Gamma\text{ENH}\xi$ (Type B; Pl. X. 10), on the other hand, which, from its superior execution, may be one of the earliest of the present class, reproduces as its obverse design one of the most familiar schemes of the preceding Period IX.; and Type C again (Pl. X. 11), in which the rider holds a palm, displays a reminiscence of Type E 1, of the same Period. It is remarkable, however, that the epigraphy of these late coins is in some cases more conservative of older forms than that of the prototypes of the preceding Period. **C** for ξ

and **Λ** for **A** are no longer found. On the other hand, the form **Α** for **A** now makes its appearance.

The break of continuity exemplified by the weight and fabric of these coins is further illustrated by the character of the signatures which they display. While in the preceding Periods a certain proportion of the signatures of one class are common to that which succeeds it, in the present case there is no overlapping of this kind, and we have to deal with a total divergence of nomenclature as regards the preceding post-Pyrrhic Periods. The name **ΦΙΛΙΑΡΧΟΞ**, indeed, is the only one that occurs on any of the earlier Tarentine types. But the earlier piece that bears this signature belongs to the last issue of the full-weight didrachms, and is separated, therefore, from the coin of the present class (which, if fabric is to count for anything, must be reckoned amongst the very latest products of the Tarentine mint) by the whole series of the reduced-weight coinages.

Nothing, on the whole, is more suggestive of altered political conditions in the present group of coins than the character of some of the signatures. Names now appear of distinctly non-Hellenic origin, and certainly of no aristocratic ring. The signature **ΞΗΡΑΜΒΟΞ** recalls the **ΞΑΡΑΜΒΟΞ** mentioned in Plato's *Gorgias*²³² as celebrated in the wine trade. **ΞΩΚΑΝΝΑΞ**, another personal name that now appears, has an equally foreign sound. We should naturally look for parallels in that old Messapian stock which supplied the præ-Hellenic ingredients of the Tarentine population, and which has left its

²³² Ed. Steph. p. 518. "Σάραμβος ὁ κάπηλος." Referred to by Avellino (*Adnotationes in Carellii Num. Vet. It. Descr.* p. 11), who also connects the form *Exærambus* of Plautus.

traces among the magistrates' names in the Tarentine colonial foundation of Hêrakleia.²³³ As a matter of fact, moreover, the indigenous elements of South-Eastern Italy had at this time gained new prominence in league with the Carthaginian, and at Brundisium, at Arpi, at Salapia, three chiefs of the typically Messapian name of Dasius²³⁴ had stood forth at the head of the national party against Rome. These Tarentine names, however, do not fit in with any known personal names belonging to this Italo-Illyric group. Their nationality remains obscure, but the appearance now, for the first time, on the Tarentine dies, of such non-Hellenic²³⁵ forms, is itself an unmistakable indication of political change, and of the coming to the fore of new elements. In default of Greek or Italic comparisons we have at least to face the possibility that Hannibal, whose fiscal needs were pressing, secured, as a kind of financial guarantee, the nomination of some of his own officers as monetary magistrates. In that case it may even happen that the origin of these

²³³ *Tabulae Heracleenses* (ed. Mazochii, p. 257, 259), **ΔΑΙΙ-ΜΟΣ ΓΥΡΡΩ** (Δάζυρος Πύρρων).

²³⁴ See Mommsen, *Die Unteritalienischen Dialekte*, p. 72. Under the form Dassius the same name had also a wide trans-Adriatic extension amongst the kindred Illyrian tribes of Dalmatia, &c.

²³⁵ Lenormant (*La Grande Grèce*, i. 27) speaks of "la proportion des noms Messapiques qui figurent parmi ceux des magistrats qui ont inscrit leur signature sur les monnaies de Tarente." But the only other clear example of a non-Hellenic form on Tarentine coins, besides the two cited above, is the remarkable inscription **INVANIΩ** or **YNVANIΩ** coupled with **ΞΩ** on a drachm. See Avellino, *Bull. Arch. Napoletano*, T. 11, p. 100. [It may be suggested that this inscription is only a barbarous rendering of the name **NEYMHNIOΞ**, which occurs on other similar drachms, sometimes in a corrupt form; one in my possession reads **NIYIHIZIO** . . . This coin has been plated.]

strange sounding names should be sought in a Semitic quarter.

A negative phenomenon presented by the signatures of the short Hannibalic period of the Tarentine coinage is also of considerable interest. The names of the principal heroes of the Tarentine Revolution, Philêmenos, Nikôn, and Dêmokrates, are conspicuous by their absence. We are left, therefore, to infer that the signatures on the group of coins do not relate to the actual *Stratêgoi*, but to magistrates fulfilling more civil functions, as masters of the mint. It is possible that we have here a symptom of a more democratic spirit in the Tarentine polity. It was in the aristocratic party at Tarentum that the Romans had found their chief support, and it was the alienation of an influential part of this, occasioned by the pitiless execution of the Tarentine hostages when recaptured after an attempted escape, which had prepared the way for the final triumph of the anti-Roman elements in the city. The younger nobles, chief among whom were Nikôn and Philêmenos, the grandsons, it may be, of the Tarentine magistrates of the same names, who sign on coins of Pyrrhus' time and Period VIII., made common cause with the Tarentine Plebs, and the success of the conspiracy seems to have been due to the union of these *Junkers* with the popular party.²³⁶ The otherwise plebeian character of the Revolution is clearly indicated in the passage of Livy, which describes this alliance, and the non-aristocratic and

²³⁶ Cf. Livy, xxiv. 13. "Ad Hannibalem . . . quinque nobiles juvenes ab Tarento venerunt Ei memores beneficiorum ejus perpulisse magnam partem se juventutis Tarentinæ referunt ut Hannibalis amicitiam ac societatem quam populi Romani malent in potestate juniorum plebem, in manu plebis rem Tarentinam esse."

even non-Hellenic character of some of the signatures of this period may well be due to the democratic lines on which the Tarentine commonwealth was now re-constituted.

That the issue of these late Tarentine coins, of the same standard as the original *Victoriatus* and the Illyrian drachms, corresponds with the Hannibalic Period at Tarentum, is corroborated by another remarkable coin, that seems to have been struck under the same auspices by the neighbouring city of Metapontion. This city, like Tarentum, became, after Pyrrhus' time, a dependent ally of Rome, and from the fact that no ordinary didrachms of the reduced weight were struck there, it would seem that the silver coinage of Metapontion had ceased entirely during this period of Roman connexion. On the removal, however, of half the Roman garrison from Metapontion to the beleaguered citadel of Tarentum, the inhabitants at once went over to Hannibal; and there exists a small Metapontine silver piece, Fig. 3, in weight and fabric closely recalling the Tarentine coins of this Period, which must certainly be also referred to the short interval of revived independence between the date of the defection in 212 and 207, when Hannibal not only withdrew his garrison, but at the same time removed the Metapontines themselves to escape the Roman chastisement.²³⁷ The coin in



Fig. 3.

²³⁷ Livy, l. xxvii. 51. "Hannibal . . . Metapontinos, civitatem universam, excitos sedibus suis, et Lucanorum qui suae ditionis erant, in Bruttium agrum traduxit."

question, of which I procured a fine specimen at Taranto, presents as its obverse type the helmeted head of Pallas, in a very late style, with loose flowing tresses, and on the reverse the usual corn-spike with an owl seated on the spray, and the legend **META** in punctuated characters.²³⁸ Both the obverse and reverse designs are degenerate versions of those that occur on one of the latest of the full-weight issues.²³⁹ The weight, however, of the present piece is 3.65 grammes, answering with sufficient approximation to that of the contemporary Tarentine pieces.

The attribution of this late Metapontine piece to the Hannibalic Period entails with it a further conclusion. Another silver coin exists, in its obverse and reverse type (including the owl symbol) identical with that described above but with the legend **ΛΟΥΚΑ** in place of **META**, showing that it was struck by the Lucani in close alliance with the Metapontines. Its weight, 3.13 grammes,²⁴⁰ is probably intended to tally with the contemporary Metapontine standard; and there can be no reasonable doubt that this alliance coin belongs to the period when the Lucanians and Metapontines threw off the Roman yoke and passed together under Hannibal's protection. Livy mentions the defection of the Lucani along with that of so many of the Italiote Greeks as a consequence of Cannæ,²⁴¹ and the extent to which their fortunes were linked to

²³⁸ A specimen of a very similar type, in which the owl is more clearly represented, is engraved in Garrucci, *Monete dell' Italia Meridionale*, T. civ. 18; but the late character of the style is not sufficiently indicated, and the weight, as usual, is omitted.

²³⁹ Carelli, *N. I. V. clvi.*, 125, 127.

²⁴⁰ Sambon, *Recherches sur les anciennes Monnaies de l'Italie Méridionale*, p. 181.

²⁴¹ Livy, xxii. 61.

those of the Metapontines appears from the subsequent notice of the same historian, according to which Hannibal, unable any longer to protect them at home, transported the inhabitants of Metapontion and the Lucanians subject to his dominion at one and the same time to the Bruttian territory.²⁴²

It thus appears that the existence at Tarentum of a class of coins minted during the period of the Hannibalic alliance is by no means an isolated phenomenon. It stands to reason moreover that whatever the nominal ἀτέλεια of Tarentum, Hannibal must have drawn largely on the resources of the great Greek city to pay his mercenaries, and the constant demand for pecuniary aid could only have been supplied by a sufficiently abundant mintage. Lenormant, indeed, has suggested that the appearance of a type of Gaulish gold coin, characteristic of the Amiens district, imitated from a Tarentine gold stater, was due to the return of Gaulish mercenaries from Hannibal's army, who in payment for their services at Tarentum had received gold pieces recently struck by the mint of that city. The theory here advanced that the prototypes of these Gaulish pieces, which are, in fact, no other than the beautiful gold staters of Tarentum representing the Dioskuri, and ranking among the finest products of the Tarentine mint, were issued during the Hannibalic period is too grotesque to need refutation; ²⁴³ but in view of the

²⁴² xxvii. 51.

²⁴³ *La Grande Grèce*, p. 60: "Comment les statères tarentins ont-ils pu parvenir jusque sur les bords de la Somme vers ce moment, et cela en quantité assez abondante pour y servir de prototype à la fabrication monétaire indigène? C'est ce qui ne peut pas absolument s'expliquer que par le retour dans ses foyers d'une troupe de ces mercenaires gaulois qui formaient une grande partie de l'armée d'Hannibal, troupe qui aura reçu le



1
(Per. I)



2
(Per. II)



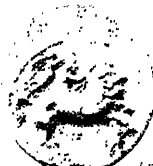
3
(Per. III)



4
(Per. III)



5
(Per. III)



6
(Per. IV)



7
(Per. IV)



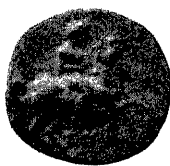
8
(Per. IV)



9
(c. 300 B.C.)



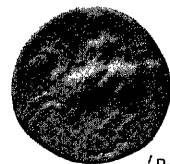
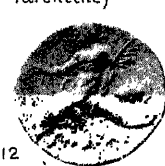
10
(Campano-Tarentine)



11
(Per. VI)



12
(Per. VII)

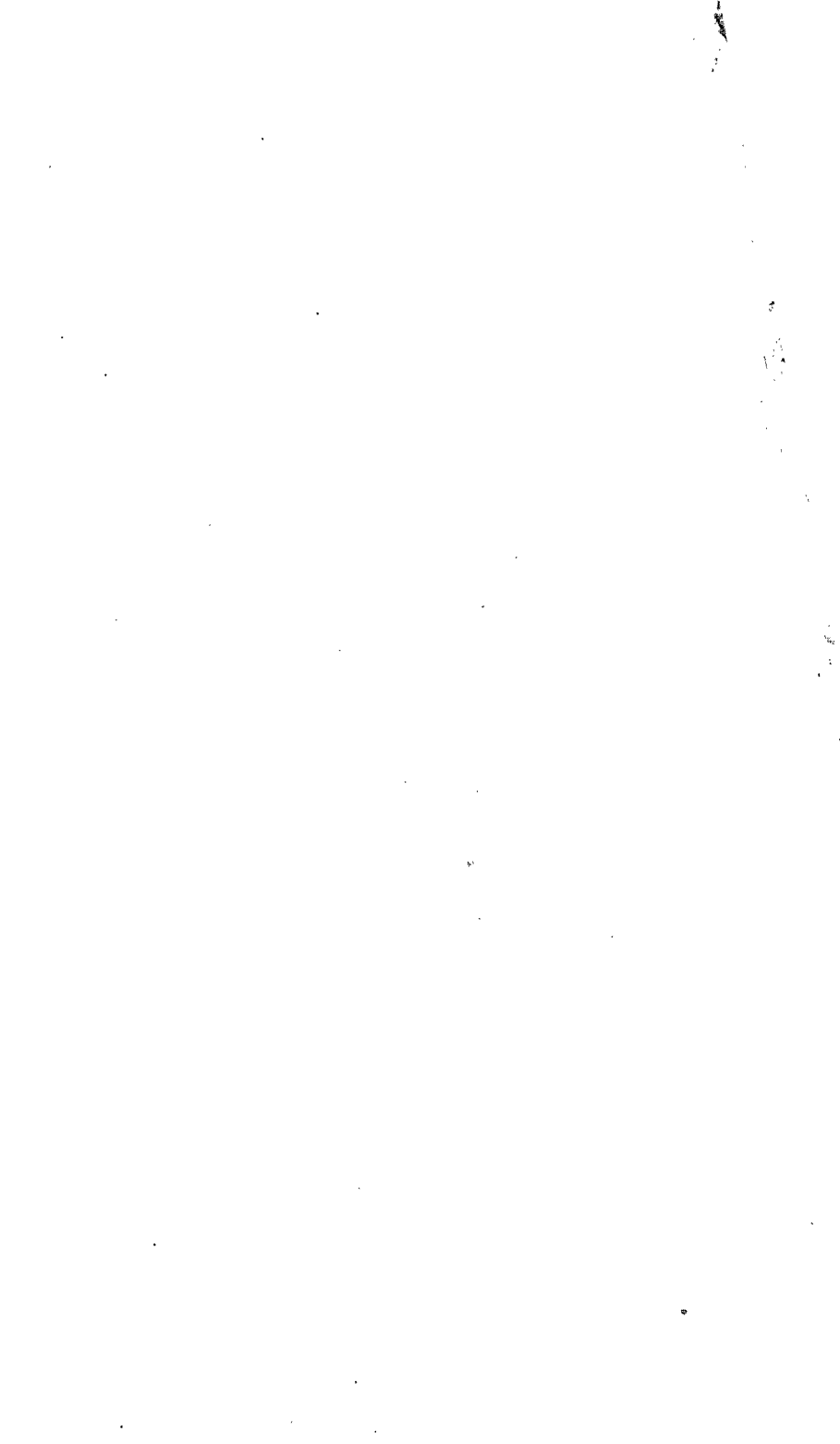


13
(Per. VII)



14
(Per. VIII)





late character of some other Tarentine gold types, the possibility of some of these having been struck at this epoch cannot be safely left out of sight.

Mr. Head²⁴⁴ has already pointed out the propriety of referring to the Hannibalic Period the gold stater (Pl. X. 15), representing a very late version of the head of the youthful Hêraklês, and on the reverse Taras driving a biga; and I have ventured to add to this the smaller coin (Pl. X. 16), exhibiting on the obverse a head of Pallas of a very late and degenerate type and on the reverse Taras again driving a biga, the horses of which show great analogy to those of the stater. This coin weighs 44·2 grains, and must thus be regarded as a third of a stater, a wholly abnormal division in the Tarentine gold series, in which, however, sixths are of frequent occurrence. The head of Pallas on this coin presents so strong a resemblance to the same head on the silver coins struck, as we have seen, by the Metapontines and Lucanians on the occasion of the Hannibalic alliance, that it is impossible not to refer it to the same period.

The 83,000 lb. of gold looted by Fabius, on his capture of Tarentum, shows that the mint could not at least have lacked bullion. With regard, however, to the silver booty taken, the historian is more explicit, and Livy's allusion

payement de ses services à Tarente en monnaies nouvellement frappées de la ville." That these coins may have reached North-Western Gaul through the hands of mercenaries is always possible; but these mercenaries must have belonged to a period long anterior to Hannibal's time if the payment they received was, as is probable, in current coin.

²⁴⁴ *Hist. Num.*, p. 48. The coin weighs 185 grs., and bears the signature **AI** on the reverse, with a thunderbolt symbol.

to the amount of coined as well as of wrought silver may be regarded as an additional testimony to the revived activity of the Tarentine mint.²⁴⁵

PERIOD X.

X. Type A.

Naked boy-rider crowning horse, standing r.

Obv.	Rev.
1. In f. to l., ΚΑΗ. Beneath horse, ΞΗΡΑΜΒΟΞ. Car. cxiii. 191. [Pl. X. 9.]	Taras astride, &c., to l., holding trident in l. hand, and with r. extending akrostolion. Beneath dolphin, ΤΑ- ΡΑΣ. In f. to r., Ε.

X. Type B.

Naked boy-rider crowning horse standing l. and lifting off fore-leg.

1. In f. to r., ΙΩ. Beneath horse, ΞΩΓΕ ΝΗΞ. Car. cxiii. 195. [Pl. X. 10.]	Taras, astride, &c., to l., holding cornucopiæ in l. hand, and with r. receiving wreath-bearing Victory.
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X. Type C.

Naked boy-rider holding *palma lemniscata*, crowning horse standing r., and lifting off fore-leg.

1. Beneath horse, ΚΡΙΤΟΞ. [Pl. X. 11.]	Taras astride, &c., to l., holding trident in r. hand, and with l. receiving wreath-bearing Victory. In f. to l., ΕΚ; in f. to r., Ι.
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X. Type D.

Bearded hippakontist in cuirass on galloping horse to r., aiming dart.

²⁴⁵ Livy, lib. xxvii., c. 16. "Argenti vis ingens facti signatique."

Obv.

Rev.

1. In f. to l., ΦΙ.
Beneath horse,
ΦΙΛΙΑΡΧΟΞ.
[Pl. X. 12. A. J. E.]

Taras astride, &c., to r., a diadem round his head, and a chlamys flowing from his l. arm, aiming a trident with his r. hand.

X. Type E.

Horseman in crested helmet and cuirass, holding *palma lemniscata* on horse standing r. and lifting fore-leg.

1. Beneath horse,
ΞΩKANNAΞ.
· Cf. Car. cxiii. 197.
"ΞΩKPATHΞ."
[Pl. X. 13.]

Taras astride, &c., to l., holding trident in l. hand, and with r. extending kantharos. In f. to r., an eagle with expanding wings. Beneath dolphin,
ΤΑΡΑΞ.

X. Type F. (Half of Unit.)

Naked boy-rider crowned by small Victory flying behind and crowning his horse, which is stationary to r.

1. Beneath horse,
ΞΩKAN
NAΞ.
· B. M. Cat. App. 3.
· Sambon, *Mon. de*
la Presqu'île Italique,
Pl. xviii. 26.
[Pl. X. 14.]

Taras astride, &c., to l., holding trident in l. hand, and with r. extending kantharos; a chlamys on his l. arm.

ARTHUR JOHN EVANS.

APPENDIX A.

COINS FROM THE BENEVENTAN FIND.

TARENTUM.

Obverse.	Reverse.	Fully described under	Weight in Grains.
1. Boy-rider, &c., with boy picking pebble out of hoof. Φ I. (Somewhat worn.)	Taras holding kantharos, trident, and small round shield. Waves and E.	IV. C 1	120
2. Lancer cantering r. Φ I/ΔI. (Fresh condition.)	Infantile Taras, with distaff and small dolphin. Vine-leaf. Waves and Φ I.	V. B 3	122
3. Same. Beneath horse, \leq A. (Fresh condition.)	Infantile Taras holding distaff and extending hand. Prow.	V. B 2	119
4. Same ; but horseman helmeted. Δ ΔI. (Fresh condition.)	Taras astride, &c., with hippocamp, shield and trident. Murex and Φ I.	V. B 5	121½

NEAPOLIS.

Weights in Grains.

- 5.
- Obv.*
- Head of Parthenopê to r., four dolphins around.

NEOPOLITΩN.

Rev. Man-faced bull crowned by Nikê to r.; head turned towards spectator. Below bull, Θ E. (Car., T. lxxix. 11) 118

- 6.
- Obv.*
- Same.

Rev. Same, but no letters under bull 112½

- 7.
- Obv.*
- Same, but different arrangement of the hair, the fillet that confines it completely circling the head. No dolphins. In f. to l., X.

Weights in
Grains.

- Rev.* Same, but the legend **ΝΕΟΠΟΛΙΤΩΝ** is on a base on which the bull stands. Under bull, **Θ**. (Car., T. lxxiv. 18) . . . 112
(Fresh condition.)
8. *Obv.* Same as last, but in f. to l. club.
Rev. Same. (Cf. Car., lxxv. 8) . . . 113½
9. *Obv.* Same as last, but in f. to l. bunch of grapes.
Rev. Same, but no letter under bull . . . 110
(Fresh condition.)
10. *Obv.* Same, but smaller head. In f. to l., Artemis holding a torch in either hand. Under neck, **ΑΡΤΕΜΙ**.
Rev. Same, but **Ν** beneath bull (Car., T. lxxv. 6) . 114
(*Fleur de coin*.)
11. *Obv.* Same, but to l. astragalus (?). Beneath head, part of inscription, **ΑΡΤΕΜΙ**.
Rev. Same, but beneath bull, **ΘΕ**. (Car., T. lxxv. 9) 113
(Fresh condition.)
12. *Obv.* Same, but to l. figure of Artemis advancing to r., and holding transverse torch. Under neck, **ΓΑΡΜΕ**.
Rev. Same, but beneath bull, a bee. (Car., T. lxxvi. 2) 110½
(Fresh condition.)
- NOLA.
13. *Obv.* Head of Pallas in crested helmet to r. On helmet, owl and olive wreath. Behind, under crest, apparently **Ξ**.
Rev. **ΝΩΛΛΑΙΩΝ** in f. above; man-faced bull to l., face in profile. Under bull, **ΛΕ** in mon. (Cf. Car., T. lxxxiv. 4) . . . 110½
(Well-preserved.)

Weights in
Grains.14. *Obv.* Head of nymph to r., hair bound with fillet.

Rev. Same, but **ΝΩΛΑΙΩΝ** in ex. No letters
under bull. (Car., T. lxxxiv. 8) . . . 106½

HYRINA.

15. *Obv.* Head of Pallas, as No. 13.

Rev. **YPINA** in f., above man-faced bull; head in
profile 115
(Somewhat worn.)

16. *Obv.* Three-quarters facing head of Hêra wearing
stephanos.

Rev. **ΑΝΙ ΦΥ**, man-faced bull, head in profile to r.
(A good deal worn.)

VELIA.

17. *Obv.* Head of Pallas to l., in crested helmet, orna-
mented with Pegasos and palmetto. In f.
above, **A**; to l., **Φ**; to r. in small square, **IE**.

Rev. **YE[ΛHTΩΝ]**. Lion tearing down stag; both
animals in profile 112½
(Fresh condition.)

18. *Obv.* Same, **Φ** to l., **K** to r.

Rev. Same insc. Lion walking l. Above, **Φ** 1 and
triquetra.

(Fleur de coin.)

19. *Obv.* Head of Pallas to l., in crested Phrygian helmet
adorned with Sphinx. Under crest behind
in minute letters, **ΞE**.

Rev. Lion to l., tearing prey; on base inscribed
YEΛHTΩΝ. In f. above, **ΞE** . . . 112

(Fleur de coin.)

METAPONTION.

Weights in
Grains.

20. *Obv.* Head of Déméter to l., with wreath of corn-spikes.
Rev. **META.** Barley spike in f. to l., caduceus and **AY.** (Cf. Car., T. clii. 24). . . . 119
21. *Obv.* Head of Déméter to l., with wreath of corn-spikes and veil falling from back hair.
Rev. Same, but on blade of spike a mouse, and in f. below **Φ.** (Car., T. clii. 6) 118½
 (Fresh condition.)
- CAPUA IN THE ROMAN NAME.
22. *Obv.* Bearded heroic head to l., in crested Corinthian helmet.
Rev. Horse's head to r. on base, upon which **ROMANO.** In f. to l., barley spike . . . 111½
 (Somewhat worn.)
23. *Obv.* Youthful head of Hêraklês to r.; lion's skin and club on shoulder.
Rev. Wolf and twins. In ex. **ROMAN[O]** . . . 108½
 (*Fleur de coin.*)
24. Another specimen. 109
 (Fresh condition.)

APPENDIX B.—CALABRIAN FIND.

Obverse.	Reverse.	Reference for Full Description.	No. of Coins in Hoard.	Weight of Selected Coins.
1. Σ I ΔEINOKPATHΞ	.	VI. D 2	1	Grains. 123
2. Γ Y APIΞTIP, horseman	ΔI, elephant	VII. A 1	6	98
3. Γ Y ΞΩΞTPATOΞ	Γ ΩY, thunderbolt	VII. A 2	9	100
4. Γ Y ΞΩΞTPATOΞ	Γ ΩY	VII. A 3	24	101
5. Γ Y ΦINTYAOΞ	Γ ΩY, prow	VII. A 4	16	99½
6. Σ I AYKON	Γ Y or YΓ	VII. A 6	21	101
7. Γ Y APIΞTIP, standing figure	ΔI, elephant	VII. B 1	10	98
8. Γ Ω NEYMH, stationary horse	APIΞ, two stars	VII. C 2	7	102½
9. Γ Ω NEYMH	Γ ΩY "	VII. C 3	33	101½
10. \mathcal{A} ΔAMOKPI	Hippocamp on shield	VII. C 4	1	99
11. Γ Y AΓOΛΛΩ, two amphoras	ΘI	VII. C 5	7	100½
12. Γ Y AΓOΛΛΩ "	ΘI B	VII. C 6	2	99½
13. Γ Y AΓOΛΛΩ "	ΘI	VII. C 7	1	98
14. Γ Y IΩPY, squatting figure	*	VII. C 8	1	99
15. \mathcal{X} ΞAΛΩNOΞ, Dioskuri	Γ Y	VII. D 1	12	100½
16. \mathcal{A} ΞAΛΩNOΞ, Dioskuros	Γ Y	VII. E 1	5	102
17. Uncertain Sig.	Γ Y, Poseidonlike Taras	VII. E 2	1	100½
18. Γ Ω Γ I AΓOΛΛΩ "	ANΘ or AN	VII. F 1	48	102
19. Γ Ω AΓOΛΛΩ.	ANΘ or AN	VII. F 2	17	99½
20. Γ Ω AΓOΛΛΩ.	ANΘ, spray.	VII. F 3	8	101½
21. Γ Ω AΓOΛΛΩ.	ANΘ, serpent	VII. F 4	1	—
22. Γ Ω ΞAΛO, Ionic capital	ANΘ or AN	VII. G 1	79	100½
23. Γ -HPA, Torch-racer	XI and diota	VII. L 1	2	100½
24. \mathcal{N} ΦIΛOKPA	AΓOΛ	VIII. A 6	17	99
25. ΦIΛOKPA \mathcal{N}	APIΞTO	VIII. C 2	14	98½
			343	

CALABRIAN FIND—(continued).

TARENTINE DRACHMS.

Obverse.	Reverse.	No. of Coins.	Weight in Grains.
Helmeted head of Pallas to l.	TAPANTINΩΝ ΞΩΞ, owl on bolt.	26	50
Same . . .	Same, but ΞΩ . . .	10	49
Same . . .	Same, but ΞΩΞ, beneath bolt ΔΙΟ.	12	48½
Same . . .	Same, but ΞΩ, beneath bolt ΔΙΟ.	6	—
Same, but head to r. . .	Owl on olive-spray, ΝΕΥ- ΜΗΝΙΟΞ ΡΟΛΥ.	7	49½
Same . . .	Same, ΝΕΥΜΗΝΙΟΞ ΑΡΙ.	6	49½
Same . . .	Same, but ΤΑΡΑ Δ Ν .	1	48
	Total Drachms . . .	68	

HÊRAKLEIA.—DIDRACHMS.

Obverse.	Reverse.	No. of Coins.	Weight in Grains.
1. Head of Pallas r., in Corinthian helmet, on which is a hippocamp. Above, ΗΗΡΑΚ- ΛΕΙΩΝ. Behind, ΗΗ.	Hêraklês sacrificing. In f. to r., thunder- bolt.	2	99
2. Head to l., griffin on helmet. Above, ΗΗΡΑΚΛΕΙΩΝ.	Hêraklês facing, look- ing r. at small Vic- tory flying towards him. In f. to l. ΦΙΛΟ.	7	99½
3. Head r., plain helmet. ΑΛΕ above, ΕΥ be- hind, Ι beneath.	Hêraklês facing, owl flying l.	4	—
	Total Hêracleia . . .	13	

CALABRIAN HOARD.—THURIAN DIDRACHMS.

Obverse.	Reverse.	
1. Helmeted head of Pallas to r.	Bull butting; beneath, $\Phi ? N ?$	. 2
2. Same.	Same, $\Delta \Phi$, between legs of bull	. 1
	Total Thurian	. 3

SUMMARY OF COINS IN CALABRIAN HOARD.

Tarentine Didrachms	. . . . .	343
„ Drachms	. . . . .	68
Hérakleian Didrachms	. . . . .	13
Thurian „	. . . . .	8
Total	. . . . .	427

APPENDIX C.
TARANTO FIND—TARENTINE DIDRACHMS.

Obverse.	Reverse.	Reference for full Description.	No. of Coins in Hoard.	Average Weight, Grs.
1. ΓΥ ΑΡΙΣΤΙΓ, horseman .	ΔΙ, elephant .	VII. A 1	3	98½
2. ΓΥ ΑΡΙΣΤΙΓ, male figure .	ΔΙ, elephant .	VII. B 1	1	93
3. ΓΥ ΞΩΞΤΡΑΤΟΞ .	ΡΟΛΥ, thunderbolt .	VII. A 2	14	98½
4. ΕΥ ΦΙΝΤΥΛΟΞ .	ΡΟΛΥ, prow .	VII. A 4	3	99
5. ΕΙ ΙΩΓΥ, squatting figure .	✠ .	VII. C 8	1	99½
6. ΙΩ ΝΕΥΜΗ .	ΡΟΛΥ, two stars .	VII. C 3	1	101
7. ΕΥ ΑΡΟΛΛΩ .	ΒΘΙ .	VII. C 6	1	100
8. ΙΩ ΙΑΛΟ, Ionic capital .	ΑΘ .	VII. G 1	9	99
9. ΙΩ ΑΡΟΛΛΩ .	ΑΘ .	VII. F 2	3	100½
10. ΙΩ ΗΙ ΑΡΟΛΛΩ .	ΑΘ .	VII. F 1	2	100½
11. ΣΙ ΛΥΚΩΝ .	ΓΥ .	VII. A 6	8	102
12. ΦΥ ΞΑΛΩΝΟΞ, Dioskuri .	ΓΥ .	VII. D 1	1	100
13. ΑΡΙ ΞΤΙΞ, anchor .	T. holds Victory .	VIII. A 1	19	97½
14. ΞΥ ΛΥΚΙΝΟΞ .	Owl .	VIII. A 9	227	99¾
15. ΞΥ ΔΕ ΛΥΚΙΝΟΞ .	Owl .	VIII. A 8	2	102¼
16. ΕΥ ΗΞΤΙΑΡ .	Bunch of grapes .	VIII. A 10	20	99¾
17. ΦΙΛΩΤΑΣ, cornucopiæ .	ΡΟΛΥ .	VIII. A 5	5	97½
18. ΔΙ ΦΙΛΩΤΑC .	Cock .	VIII. A 11	60	99½
19. ΑΓΑΘΑΡΧΟΞ .	Torch .	VIII. B 1	45	99¾
20. ΦΙ ΙΩΓΥΡΟΞ .	Cicada .	VIII. B 2	17	97½
21. ΙΑΓΕΑC .	ΡΟΛΥ .	VIII. A 4	5	97
22. ΛΕΩΝ, cornucopiæ .	Λ, lion .	VIII. B 3	14	99
23. ΚΥΝΩΝ, mask .	T. holds kantharos .	VIII. B 4	23	98½
	Carried forward .	.	484	

APPENDIX C (continued).
TARANTO FIND—TARENTINE DIDRACHMS.

Obverse.	Reverse.	Reference for full Description.	No. of Coins in Hoard.	Average Weight. Grs.
24. ΕΥ ΦΙ ΊΕΝΕΑΞ	Brought forward	VIII. C 1	484	100 $\frac{1}{4}$
25. ΔΙ ΑΡΙΞΤΟΚΛΗΞ	Corn-spike	VIII. D 1	19	100 $\frac{1}{4}$
26. Α ΝΙΚΟΚΡΑΤΗΞ	Head of nymph	VIII. D 2	152	101 $\frac{1}{2}$
27. ΝΙΚΥΛΟΣ Dioskuri.	Ionic capital	VIII. O 1	1	100 $\frac{3}{4}$
28. ΕΙ ΦΙΛΗΜΕΝΟΞ	Α	VIII. E 1	2	98 $\frac{1}{2}$
29. ΦΙΛΙΚΚΟΣ	Bucranium	VIII. F 1	16	98 $\frac{3}{4}$
30. ΗΡΑΚΛΗΤΟΞ	Tripod	VIII. G 1	9	100
31. ΔΙ ΑΓΟΛΛΩΝΙΟΞ	ΕΠ, thymiatérion	VIII. H 1	60	99 $\frac{1}{4}$
32. ΘΙ ΑΡΙΞΤΟΚ	T. with chlamys	VIII. H 2	69	98 $\frac{3}{4}$
33. ΗΓΓΡΟΔΑ	Rudder	VIII. K 1	34	99
34. ΑΡΙΣΤΟΚΡΑΤΗΞ	ΔΙ and amphora	VIII. L 1	38	98 $\frac{3}{4}$
35. ΑΡΙΣΤΕΙΔ	ΓΙ and term	VIII. L 2	22	99 $\frac{3}{4}$
36. ΕΥ ΔΑΜΟΚΡΙΤΟΞ	ΗΡΑ	VIII. L 3	11	99 $\frac{1}{4}$
37. ΕΥ ΑΡΙΞΤΩΝ	Ξ ΙΩΡ	VIII. M 2	31	99 $\frac{1}{4}$
*38. ΗΡΑ ΔΑΙΜΑΧΟC	Α	IX. A 1	16	100
*39. ΙΩΓΥΡΙΩΝ ΞΩ	ΕΠ, head of Pan	IX. B 1	5	100 $\frac{1}{4}$
*40. ΟΛΥΜΠΙΞ	Tripod	IX. C 1	5	99 $\frac{1}{2}$
*41. ΑΡ ΑΡΙΞΤΙΓΓΟΞ	Υ	IX. E 1	26	100
*42. ΦΙΛΟΚΛΗC Φ Α	Two amphoras	IX. F 1	11	101
Uncertain			5	98 $\frac{1}{4}$
	Total Tarentine Didrachms.		1032	

* Fleur de Coin.

APPENDIX C (*continued*).
TARANTO FIND—TARENTINE DRACHMS.

Obverse.	Reverse.	Reference for full Description.	No. of Coins in Hoard.	Average Weight.
				Grs.
1. Head of Pallas in crested helmet, } on which Seylla	NEΥMHNIΟΞ API	VII. 1	4	48
2. Same	NEΥMHNIΟΞ ΠOΛY	VII. 2	2	47
3. Same; I on helmet	Α	VII. 5	1	49
4. Same (flowing hair)	ΞΩΞ (or ΞΩ), ΔΙΟ (or ΔΙ)	VII. 6	2	48½
5. Same as 1,	ΕΗΡΑΚΑΗΤΟΞ, flower	VIII. 2	1	
6. Same	ΕΙΞΤΙΑΡΧΟΞ ΕΥ, grapes.	VIII. 3	1	48½
7. Same	ΝΙΚΟΚΡΑΤΗΞ Α	VIII. 6	2	49½
8. Same	ΑΡΙCΤΙC, anchor	VIII. 4	1	50½
9. Same	ΟΛΥΜΠΙΞ, wreath	IX. 2	2	50½
Total Tarentine Drachms			16	

APPENDIX C (*continued*).

TARANTO FIND—TARENTINE LITRÆ.

Obverse.	Reverse.	Compare Didrachms.	No. of Coins in Find.	Average Weight.
1. Cockle shell	Dolphin; beneath, owl	VIII. A 7	12	Grs. 10 $\frac{1}{16}$
2. Same	Same; owl and $\leq Y$	VIII. A 7	2	8 $\frac{1}{2}$
3. Same	Same; thunderbolt	VII. A 2	25	9 $\frac{2}{3}$
4. Same	Same; E	{ VIII. G 1 } { IX. B 1 }	7	9 $\frac{1}{8}$
5. Same	Same; E and flower	VIII. G 2	1	9 $\frac{1}{2}$
6. Same	Same; R and doe	IX. E 1	10	9 $\frac{2}{3}$
7. Same	Same; ΔI, head of nymph	VIII. D 1	2	9 $\frac{1}{2}$
8. Same	Same; ΦI	.	4	9 $\frac{7}{8}$
9. Same	Same; rudder	VIII. H 2	1	9
10. Same	Same; R	IX. D 1	3	9 $\frac{7}{8}$
11. Same	Same; in f. above, Victory flying	.	4	9 $\frac{1}{2}$
12. Same	Same; in f. above, rhyton	IX. F 1	2	8 $\frac{3}{4}$
13. Uncertain, or with no symbol or letter	.	.	15	9 $\frac{1}{16}$
Total Tarentine Litræ			88	

APPENDIX C (*continued*).
TARANTO FIND—TARENTINE HÉMILITRA.

Obverse.	Reverse.	Compare Didrachms.	No. of Coins in Hoard.	Average Weight.
1. Cockle	Dolphin; beneath, owl	VIII. A 8, 9	1	Grs. 4
2. Same	Same; beneath, thunderbolt	VII. A 2	3	4½
3. Same	Same; E	VIII. G 1, 2	8	4¼
4. Same	Same; flower?	VIII. G 2?	1	5
5. Same	Same; doe	.	13	5⅓
6. Same	Same; R	IX. D 1	6	4½
7. Same	Same; OI	{ VII. C 6 VIII. H 2 }	1	4¼
8. Same	Same; T	.	3	4¾
9. Same	Same; Φ	.	2	4½
10. Same	Same; Victory flying	.	1	4½
Uncertain, or without letters or symbol	.	.	7	5⅓
Total Tarentine Hémilitra			46	

APPENDIX C (*continued*).

TARANTO FIND—TARENTINE DIOBOLS (Pallas Type).

Obverse.	Reverse.	Compare Didrachms.	No. of Coins in Hoard.	Average Weight.
1. Head of Pallas to r. in crested helmet, on which Seylla.	Héraklés standing, facing l., and strangling lion. In f. to r., cicada.	VIII. B 2	3	Grs. 16 $\frac{2}{3}$
2. Same	Same; but facing r. In f. to l., club; between legs, R .	IX. E 1?	3	16 $\frac{2}{3}$
3. Same	Same. In f. to l., doe; between legs, R .	IX. E 1?	7	17 $\frac{1}{4}$
4. Same	Same. In f. to l., doe and club; between legs, R .	IX. E 1?	5	17 $\frac{2}{3}$
5. Same	Same. Inscr., TAPANTINON ; between legs, ΦΙ.	. . . .	8	16 $\frac{1}{2}$
6. Same	Same. In f. to l., bucranium; between legs, ΦΙ .	VIII. E 1	2	16
7. Same	Same; but in f. to l., thunderbolt; between legs, ΦΙ.	. . . .	11	15 $\frac{7}{11}$
8. Same	Same. In f. to l., club; between legs, ΔΙ.	. . . .	2	17
9. Same; but hippocamp on helmet.	Same. In f. to l., club and owl above; in f. to r., ΞΥ .	VIII. A 8, 9	2	16
10. As 1; but head to l.	Héraklés facing r., grappling with lion, and with r. raising club. Beneath, bow.	. . . .	2	14 $\frac{3}{4}$

11. Same as 1—8 . . .	As 1—7; but uncertain or without symbols or letters.	.	19	16 $\frac{2}{3}$
12. Same . . .	Infant Héraklès strangling serpents. In f. to l., TA and Υ . In ex. thunderbolt.	VII. A 2	11	16 $\frac{3}{4}$
13. Head of Pallas in tri-ple-crested helmet, three-quarter facing to l.	Héraklès strangling lion, as 2, &c. In f. to l., club and Amazonian shield; between legs, R .	IX. E 1?	7	17
14. Same . . .	Same; club to l. Insc., TAPANTI-NON ; between legs, R .	IX. E 1?	3	15 $\frac{1}{3}$
15. Same, to r.	Hérakles kneeling on lion and raising club to strike it: In f. to r., tripod.	{ VIII. F 1 } { IX. C 1 }	32	15 $\frac{3}{4}$
16. Same . . .	Same. In f. to r., anchor . . .	VIII. A 1	1	14 $\frac{3}{4}$
17. Head of Pallas to l. in Corinthian helmet.	Same as 11, &c. In f. to l., club; between legs, HH .	.	2	16
18. Same . . .	Same; between legs, ΦI . . .	.	4	16 $\frac{1}{2}$
19. Same . . .	Same; but R . . .	IX. D 1	1	16 $\frac{1}{4}$
20. Same . . .	Same; but ΔI . . .	.	1	16
21. Same . . .	Same as 13. Beneath, owl and uncertain object.	VIII. A 8, 9	9	16 $\frac{1}{2}$
22. Same . . .	Same; but uncertain letters . . .	.	26	16 $\frac{3}{4}$
Total Tarentine Diobols (Pallas Type) . . .			161	

APPENDIX C (*continued*).
TARANTO FIND—TARENTINE OBOLS (Diota Type).

Obverse.	Reverse.	Compare Didrachms.	No. of Coins in Hoard.	Average Weight. Grs.
1. Diota and three pellets	Diota and three pellets; thunderbolt	VII. A 2	5	7 $\frac{1}{16}$
2. Same	Same; owl	VIII. A 8, 9	10	7 $\frac{1}{16}$
3. Same	Same; Δ and head of nymph	VIII. D 1	3	6 $\frac{1}{8}$
4. Same	Same; doe and A	IX. E 1	17	8 $\frac{5}{17}$
5. Same	Same; Φ	IX. D 1	5	7 $\frac{3}{8}$
6. Same	Same; Φ	.	6	8 $\frac{1}{8}$
7. Same	Same; Φ and bucranium	VIII. E 1	1	7 $\frac{1}{2}$
8. Same	Same; E	{ VIII. G 1—2 IX. B 1 }	6	7
9. Same	Same; grapes	VIII. A 10	1	8
10. Same	Same; cicada	VIII. B 2	1	8 $\frac{1}{8}$
11. Same	Same; Δ	.	1	8
12. Same	Same; H and uncertain symbol	.	1	8
13. Same	Same; but :: and Φ	.	1	
14. Same	Same as 1—12, but no letter or symbol	.	34	8 $\frac{2}{3\frac{1}{2}}$
Total Tarentine Obols (Diota Type)			92	

APPENDIX C (*continued*).
TARANTO FIND—TARENTINE OBOLS (Horse's Head).

Obverse.	Reverse.	Compare Didrachms.	No. of Coins in Hoard.	Average Weight.
1. Horse's head	Horse's head; thunderbolt	VII. A 2	3	Grs. 6½
2. Same	Same; A	VIII. B 3 ?	1	5
3. Same	Same; E	{ VIII. G 1—2 }	1	6½
4. Same	Same; Φ	{ IX. B 1 }	1	7½
5. Same	Same; tripod	{ VIII. F 1 }	3	6
6. Same	Same; Δ	{ IX. C 1 }	6	6½
7. Same	Same; doe	IX. D 1	1	7
8. Same	Same; grapes	.	22	7½
9. Same	Same; Α	.	4	6¾
10. Same	Same; Α and club	VIII. A 10	1	7
11. Same	Same; owl	IX. E 1 ?	1	8
12. Same	Same; uncertain or no letter or symbol.	IX. E 1 ?	1	6½
13. Same	Same; uncertain or no letter or symbol.	VIII. A 8, 9	1	
		.	23	
	Total Tarentine Obols (Horse's Head)	.	68	

Av. weight.

TARANTO FIND—HÉMILOBOLIA.

Two crescents and four pellets on *obverse* and *reverse* 33 . 3¾ grs.

APPENDIX C (*continued*).

TARANTO FIND—THURIAN DIDRACHMS.

Obverse.	Reverse.	No. of Coins in Hoard.
1. Head of Pallas to l., in crested Athenian helmet, on the fore-part of which is a griffin.	Bull butting r., the head turned towards the spectator. In f. above, owl flying. In ex., ΘΟΥΡΙΩΝ .	5
2. Head of Pallas to r., in helmet with wreath.	Same, but legend in f. above. In ex. flying bird.	4
3. Same.	Same, but floral device in ex.	1
4. Same.	Same, but without symbol.	1
5. Head of Pallas to r., in Corinthian helmet.	Same.	3
6. Laureate head of Apollo to r.	Same type. ΘΟΥΡΙΩΝ in ex. No symbol.	6
7. Same.	Same. In ex. flying bird.	1
Total Thurioi (Average weight 98½ grs.)		22

SUMMARY OF COINS IN TARANTO HOARD.

Tarentum didrachms	1,032
„ drachms	16
„ litræ	88
„ hêmilitra	46
„ diobols (Pallas type)	161
„ obols (diota type)	92
„ obols (horse's head)	68
„ hêmibolia	33
Total Tarentine	1,536
Thurioi didrachms	22
Total coins in hoard	1,558

II.

NOTANDA ET CORRIGENDA.

I.—N OR M ON ATHENIAN COINS.

IN a recent article in the *Revue des Etudes grecques*, No. 4, 1888, entitled *La 13e Prytanie et le classement chronologique des monnaies d'Athènes*, M. Théodore Reinach cites an inscription lately discovered at Eleusis, which goes to prove that in the later part of the third century B.C. there were at Athens thirteen Prytanies, and consequently thirteen tribes. He attributes this inscription to about B.C. 214.

Down to B.C. 306 there had been only ten Athenian tribes, but in that year the creation of two new tribes called Antigonis and Demétrias, raised the total number to twelve. Later on the names of these two additional tribes were changed to the 2nd Erechtheis and the 2nd Antiochis, the total number still remaining twelve. Some time after this, and during the reign of Ptolemy Philadelphus (M. Reinach supposes in B.C. 255), the tribe Ptolemais was created, thus raising the number to thirteen, at which it stood until about B.C. 200, when the 2nd Erechtheis and the 2nd Antiochis were merged in a single tribe, henceforth called Attalis, thus bringing the number again down to twelve, at which figure it continued to stand until the reign of Hadrian.

M. Reinach's researches tend, therefore, to show that

between B.C. 255 and 200 there were at Athens thirteen tribes. Whether he is right or not in this supposition I leave to others better qualified than I am to decide, but when M. Reinach proceeds to overturn the entire chronological classification of the series of the Athenian tetradrachms to suit his new theory on what seem to me insufficient grounds, I am bound to say that I am unable to agree with him.

Although there may be considerable uncertainty as to the exact sequence of the series, over one hundred in number, of the coins of what is called the "new style," most numismatists are now agreed that they are divisible into several distinct classes, which follow one another in the following chronological order:—

Class i. Seventeen series with two monograms (*B. M. Cat.* Plates VIII., IX.).

Class ii. Nine series, in which the two monograms resolve themselves into two *abbreviated* magistrates' names (*Ibid.* Pl. X.).

Class iii. Twenty-six series bearing three magistrates' names usually written at full length (*Ibid.* Pl. XI.).

Class iv. Fifty-one series, in thirty-one of which the third name is omitted, the remaining two, those of the chief magistrates, being still usually written in extenso (*Ibid.* Plates XII., XIII.).

With regard to the sequence of these four classes there can be no doubt whatever; the continuous decadence of style is sufficiently evident to any one who will be at the pains of examining and comparing one with another the plates above referred to. The series which go to make up the several classes we are, however, unfortunately still unable to place in their proper order, for very few of them can be exactly dated. One fact, however, seems

quite certain, viz., that Class IV. comes to an end in B.C. 87—6 with the series reading **ΒΑΣΙΛΕ. ΜΙΟ-ΡΑΔΑΤΗΣ—ΑΡΙΣΤΙΩΝ.**

Now, M. Reinach seeks to establish as an axiom that in every instance where the numeral **N** (= 13) appears on the amphora, the series to which it belongs must be assigned to the period during which the Athenian tribes were thirteen in number, i.e. B.C. 255—200.

Hitherto it has always been taken for granted that in such cases **N** is merely an engraver's blunder for **M**, and not intentional; and notwithstanding M. Reinach's arguments I am still convinced that such is the fact. He proceeds to cite six series in which the letter **N** occurs, which I will enumerate in what I believe to be their chronological order. (See table on next page.)

On the first of these coins, after a fresh examination of the Museum specimen, I remark that the letter on the amphora is not **N** as it is invariably formed on the Athenian coins of the "new style," that is to say upright, but **N** slanting, like the first three limbs of **M**. Let us, however, for the sake of argument, grant that the letter as it stands is **N** on this as on all the other specimens cited, and further, that all the above series in which that letter occurs must be placed before the year B.C. 200. It follows that the three series of Class IV., the symbols on which are the figures of Tyche, of Demeter, and of a Stag, and which are in point of style among the very latest and rudest of all the Athenian silver coins, fully as late in style as, and even more careless in execution than, the dated series with the name of Mithradates, must *a fortiori* carry back with them into the third century all those series which are of distinctly earlier style, that is to say, the whole number of series in Classes I., II., and III., and

Class.	Magistrates.	Symbols.	Letter.	<i>B. M. Catalogue and date.</i>
i.	Two monograms	Two serpents .	N	Series X., B.C. 220—197.
iii.	ΑΜΜΩΝΙΟΣ—ΚΑΛΛΙΑΣ ΕΠΙΦΑΝΗΣ	Two torches. .	N	Series XXVII., B.C. 186—147. (Prokesh. <i>Ined.</i> p. 30.)
iii.	MENEΔ—ΕΠΙΓΕΝΟ ΑΡΙΣΤ	Asklepios standing	N	Series XLVI., B.C. 186—147.
iv.	ΔΩΣΙΘΕΟΣ—ΧΑΡΙΑΣ .	Tyche standing .	N	Series LX., B.C. 146—87. (Rollin and Feuarent.)
iv.	ΧΑΡΙΝΑΥΤΗΣ—ΑΡΙΣΤΕΑΣ ΘΕΟΞ	Demeter holding two torches	N	Series LXXII., B.C. 146—87. (Beulé, p. 381.)
iv.	ΝΕΣΤΩΡ—ΜΝΑΣΣΕΑΣ .	Stag standing .	N	Series XCVII., B.C. 146—87.

very nearly all those in Class IV. Such is the inevitable conclusion to which we are driven if M. Reinach's theory that the numeral **N** stands for the 13th Prytany is to be accepted.

I need hardly say that the few series to which we are able to assign approximate or exact dates, such as **ANTIOXOS—KAPAIXOS** to B.C. 176, and **ΑΠΕΛΛΙΚΩΝ—ΓΟΡΓΙΑΣ**, **ΑΡΙΣΤΙΩΝ—ΦΙΛΩΝ**, **ΕΥΜΗΛΟΣ—ΚΑΛΛΙΦΩΝ** and **ΜΙΘΡΑΔΑΤΗΣ—ΑΡΙΣΤΙΩΝ** to the years immediately preceding the siege of Athens by Sulla, B.C. 86, none of which are separable in style from those which happen to bear the letter **N**, render such a conclusion simply impossible.

To attribute some series to the age of Mithradates, and to transfer others which are absolutely identical in style and work to a period ending more than a century earlier, is, to my mind, tantamount to a deliberate rejection of style and fabric as a criterion for arriving at the truth with regard to the historical sequence of Greek coins. Far stronger arguments than those M. Reinach adduces will be needed before such convincing evidence in favour of a late date, as is afforded by the style of these coins, can be set aside.

I prefer, therefore, the simple explanation arrived at by Beulé, who, after examining several thousands of coins, came to the conclusion that the letter **N** was in some rare instances carelessly written where **M** was intended.

It must be borne in mind that the letter **N** is more easily formed than **M**, especially on a concave surface such as the die-sinker had to work upon, and that a careless workman might occasionally be tempted to substitute it, or even do so unwittingly by a slip of his tool. Epigraphists can often point out similar blunders on inscrip-

tions on stone. If, however, M. Reinach still prefers to regard the letter **N** as intentional on account of the comparative frequency of its occurrence, he may revert to the explanation which he himself gave in a recent paper in the *Revue des Etudes grecques*, 1888, entitled "Les Stratèges sur les monnaies d'Athènes," in the course of which he suggested that the letter **N** might refer not to the Prytany, but to the month of the embolismic years (the 3rd, 5th, and 8th of each cycle of eight years) in which an intercalary month was added, raising the number of months in these years from twelve to thirteen.

II.—TWO MISREAD COINS OF EPHESUS.

TRAJAN.

Sestini, in his *Lettere di continuazione* VIII. 57, and Tab. II, fig. 3, publishes a coin of Ephesus struck under Trajan, which he describes as follows :—

Obv.—**ΑΥ . ΝΕΡ . ΤΡΑΙΑΝΟC . CΕ . ΑΡΙCΤΟC.**
 Protome Trajani, capite laureato, cum paludamento
 ad pectus.

Rev.—**ΝΕΩ . ΕΦΕ . ΔΗ . ΕΠ . ΕΧΑΡΑ.** Tropæum,
 juxta quod captivus clypeo insidens.

A similar coin is published and engraved in Dumersan's *Description des médailles antiques du cabinet de feu M. Allier de Hauteroche*, p. 84 and pl. XIV. 19. Paris, 1829.

Obv.—**ΑΥ . ΝΕΡ . ΤΡΑΙΑΝΟC ΚΑΙC////ΓΕΡ ΔΑ
 ΠΑΡ.** Trajan.

Rev.—**ΟΜΟ . ΕΦΕ . ΔΗ . ΕΠ . ΕΧΑΡ.** Prisonnier
 assis sur des armes. Trophée.

The specimen from the Allier Cabinet was acquired by the British Museum in 1846 at the sale of Baron Koller's coins. It may be thus described:—

Obv.—ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙ Σ[Ε ΑΡΙ] ΓΕΡ ΔΑ
ΠΑΡ. Bust of Trajan r. laur., wearing cuirass.

Rev.—Ο[ΝΕ]Ω ΕΦΕ ΔΗ ΕΠΕΧΑΡ. Captive, Parthia, seated l. on a round shield, resting her head on her right hand and holding bow (?) downwards in l.; behind her, trophy of arms, at the foot of which are two hexagonal shields.

Æ. 1·0.

That the British Museum specimen is identical with the Allier coin can be doubted by no one who compares the coin with the engraving in the Allier Catalogue. Whether the coin described by Sestini is another example with a different obverse legend, or whether, with his habitual inaccuracy, he has wrongly read it, we have no means of deciding; but I cannot help suspecting that Sestini's coin was, in point of fact, identical in all respects with the specimen described by Dumersan which now lies before me.

The full formula, Imperator Nerva Trajanus Cæsar Augustus Optimus Germanicus Dacicus Parthicus, proves that it must have been struck in the year A.D. 116—117, the last year of Trajan's reign, during which time alone he bore the title Parthicus.

The chief interest of this coin lies, however, in the reverse inscription, interpreted by Sestini as follows:—
ΝΕΩ[κρων] ΕΦΕ[σίων] ΔΗ[μήτριος] ΕΠ[ιμελητήρς]
ΕΧΑΡΑ[ξε], which he explains, “può supporre che la nostra medaglia fosse coniatà da Demetrio Curatore dei neocori Efesii in occasione di qualche vittoria che l'imperatore avesse avuta, e probabilmente contro i Partii.”

With regard to the word **ΕΧΑΡΑ** he says, "potrebbe essere per *ἐχάραξε*, da *χαράσσω*, *numum cudit o sculpsit*."

Dumersan accepts Sestini's reading, though substituting **ΟΜΟ**[*νοια*] for **ΝΕΩ**[*κων*].

Both these readings and explanations are certainly wrong. The inscription begins clearly with the letter **Ο**, the next two letters are obliterated, then follow **ΩΕΦΕΔΗ ΕΠΕΧΑΡ**. I would therefore suggest **Ο ΝΕΩ**[*κόρος*] **ΕΦΕ**[*σίων*] **ΔΗ**[*μος*] **ΕΠΕΧΑΡ**[*αξε*], the meaning being that the people of Ephesus engraved upon this coin a group of a Trophy and Captive in commemoration of Trajan's conquest of Parthia.

With this coin we may compare a contemporary piece struck at Tripolis, in Phrygia, bearing the inscription **ΘΕΟΔΩΡΟΣ Β. ΕΧΑΡΑ**[*ξε*] **ΤΡΙΠΟΛ**[*ιτων*], on the reverse of which is the Emperor standing before a trophy at the foot of which stands a captive. In each case the words *ἐπεχάραξε* and *ἐχάραξε* seem to refer to the subject engraved upon the coin, in the one case by the order of the *Δῆμος*, in the other by the authority of the magistrate. The verb *ἐπιχαράσσειν* applied to coin-types occurs in Plutarch, *Porhic.* 11, καὶ τῶν νομισμάτων τοῖς παλαιότατοις βοῦν ἐπεχάραττον ἢ πρόβατον ἢ σὺν. The group of Parthia and the Trophy may be compared with the Roman gold coins reading **PARTHIA CAPTA** (Cohen, 1st ed. ii. p. 18, no. 97).

ANTONINUS PIUS.



Vaillant, *Numismata Græca*, p. 291, thus describes a coin of Ephesus struck in the reign of Antoninus Pius:—

“**ΑΠΟΛΛΩΝ ΕΜΒΑCΙΟC ΕΦΕCΙΩΝ.** Apollo stans nudus, dextrâ demissâ, sinistro cubito còlumnæ imposito, telum gerit: ex adverso Diana Venatricis habitu; dextrâ pariter demissâ, sinistrâ jaculum tenet.”—*Num. Antonini Pii.*

“**ΕΜΒΑCΙΟC** Apollinis fuit cognomen, hoc est *ascendens navim*, ex re nauticâ a veteribus ei datum, ut **ΕΚΒΑCΙΟC**, id est *descendens navim*. Priori Jasonem cum Argo navem esset conscensurus rem sacram fecisse docet Apollonius [*Argonautica* i. 359, 404]. Utroque cognomine Cyzicenum Apollinem vocatum scribit Socrates; nummus vero apud Ephesios etiam Apollinem *Εμβάσιον* cultum fuisse nobis demonstrat.”

Eckhel, ii. 516, relying upon Vaillant's description adds: “Numen urbi opportunum cujus amplum fuit mari commercium,” and all subsequent writers have followed like sheep the leading of these illustrious numismatists. When I say all, I must, however, make one exception, for the late Mr. J. Y. Akerman, while professing to follow Vaillant, to whose work he refers, describes the coin as follows (*Num. Chron.* iv. 97):

Obv.—Laureated head of Antoninus.

Rev.—ΑΠΟΛΛΩΝ ΕΜΒΑΣΙΟΣ ΕΦΕΣΙΩΝ. A galley.

(Vaillant, *Num. Græca.*)

Now this coin, with galley for type, is not published, so far as I am able to discover, either by Vaillant or by any other writer. Akerman, who may have had before him some illegible coin with a galley on it, has, I believe, failed to understand Vaillant's Latin description, and seeing the word *navis* several times repeated both by Vaillant and Eckhel has simply jumped to the conclusion that his coin with the galley read ΑΠΟΛΛΩΝ ΕΜΒΑΣΙΟΣ. Thus the title 'Εμβάσιος has found its way not only into all the numismatic works, including my own *Historia Numorum*, p. 498, but into standard works on Ephesus, such as Guhl's *Ephesiaca*, p. 121. I am now in a position to show that Vaillant was mistaken both in his reading of the legend and in his description of the type of this coin, for there is a specimen in the British Museum which may be thus described:

Obv.—Τ ΑΙΛΙΟΣ ΚΑΙΣΑΡ ΑΝΤΩΝΕΙΝΟΣ. Bust of Antoninus Pius r., laureate, wearing cuirass and paludamentum.

Rev.—ΑΠΟΛΛΩΝ ΙΚΕ [C]ΙΟΣ ΕΦΕΣΙΩΝ. Apollo Hikesios and Artemis standing face to face; Apollo l., naked but for chlamys wound round l. arm and hanging from his elbow, grasps with his r. hand an olive-branch offered him by Artemis, and holds bow in l. Artemis, r., wears a long chiton with diplois and a quiver at her shoulder; she holds in l. a bow and in lowered r. an olive-branch which she offers to Apollo: from the stalk of the branch, near her hand, hangs apparently a fillet.

The coin is not in very good condition, but all the

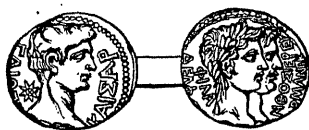
letters of the inscription are legible, except perhaps the one which I have enclosed in brackets.

Vaillant has mistaken the chlamys which hangs in a straight line from Apollo's elbow for a column, upon which he makes him rest, the bows held by the two divinities he has taken for darts, and finally the epithet **IKECIOC** for **EMBACIOC**, while the olive-branch he has not seen at all. Probably his specimen was in very poor condition.

The epithet **IKECIOC** as applied to Apollo, is, I believe, quite new, though it is well known as a title of Zeus. The olive-branch offered by Artemis and grasped by Apollo, is the *ῥάβδος ἰκετηρία*, the branch which suppliants held in their hands, and therefore an appropriate symbol for the god in his character of *ἰκέσιος*, the Protector of Suppliants. This type, though without the inscription, recurs at intervals on the Ephesian coins of later emperors.

III.—PHILADELPHIA LYDIÆ.

CALIGULA.



Having now pointed out a few of the mistakes into which previous writers on Greek Numismatics have fallen, it is fit that I should draw attention to a recent erroneous attribution of my own, which, if uncorrected, might mislead students of the Greek Imperial series. In the *Num. Chron.* 1888, p. 300, I published a remarkable bronze coin of Caligula, bearing on the obverse a head of that emperor,

with a star in the field, and on the reverse two beardless heads jugate, the nearest and perhaps the other laureated, accompanied by the inscription **ΦΙΛΑΔΕΛΦ. [ΞΑ]ΝΘΟΣ ΙΕΡΕΥΣ [ΓΕ]ΡΜΑΝΙΚ.** This coin I supposed to have been issued under the authority of one Xanthus, who bore the title *Ἱερεὺς* in the two neighbouring towns, Philadelphia and Germanicopolis, in Cilicia. On showing this coin lately to M. Waddington he expressed doubts as to the correctness of my attribution to Cilicia, pointing out to me that in style and fabric it resembled more closely certain coins of the same period struck at Philadelphia in Lydia.

There is in the British Museum one coin especially which bears a marked resemblance to the one now under discussion. It was inaccurately published by Borrell (*Num. Chron.*, Vol. VIII., 1846, p. 9), and may be thus described: *obv.* **ΓΑΙΟΣ ΚΑΙΣΑΡ**, head of Caligula with a star behind it; *rev.* **ΦΙΛΑΔΕΛΦΕΩΝ ΕΡΜΟΓΕΝΗΣ ΟΛΥΜΠΙΟΝΙΚΗΣ**, two beardless heads jugate r.; behind them a palm-branch; **Æ 7.** Whether the jugate heads on this coin are female, and intended, as Borrell supposes, for Agrippina and Julia, sisters of Caligula, is extremely doubtful. The new coin engraved above may serve to throw some light on this question. Here, at any rate, one of the heads is distinctly laureate, and therefore male, and this inclines me to the opinion that they represent Germanicus and Agrippina, the father and mother of Caligula (cf. the coin of Mytilene reading **ΘΕΟΝ ΓΕΡΜΑΝΙΚΟΝ ΘΕΑΝ ΑΓΡΙΠΠΙΑΝ**, Eckhel, vi. 214), a hypothesis which is rendered still more probable by the remarkable inscription **[ΞΑ]ΝΘΟΣ ΙΕΡΕΥΣ ΓΕΡΜΑΝΙΚ**, if, as it would seem, the last word is to be completed, **ΓΕΡΜΑΝΙΚ[ΟΥ].**

In this case Xanthus would be the Priest of the cultus of Germanicus ; cf. a similar priesthood of Drusus, the father of Germanicus, at Athens, 'Ιερεὺς Δρούσου ὑπάτου, an office which was maintained from B.C. 9 down to the reign of Hadrian (*Corp. Inscr. Att.* 1009, &c.).

On the other hand, if both heads are male and laureate they may stand for Germanicus and Drusus junior, the son of Tiberius, for these two, brothers by adoption, were worshipped at the neighbouring town of Sardes, under the title ΝΕΟΙ ΘΕΟΙ ΦΙΛΑΔΕΛΦΟΙ (Eckhel, vi. 211).

IV.—LYDIAN GOLD COINAGE.

In my paper on "Electrum Coins and their Specific Gravity" (*Num. Chron.* 1887, p. 303), I gave the weight of a gold stater of Crœsus in the British Museum (*B.M. Guide*, Pl. I. 13) as follows:—In air 124·20, in water 118·02, difference 6·18, specific gravity 20·09 ; and I remarked that the specific gravity was higher than that of pure gold, which I quoted as 19·28. On the advice of Dr. Evans I have recently submitted this coin to Mr. Fletcher, the keeper of the department of mineralogy in the British Museum, who has had the coin again weighed, with the result that he makes the specific gravity only 19·329, which he informs me is within that of pure gold, which when most compressed is as high as 19·367.

The result proves that the coinage of Crœsus was of very pure gold, unmixed with any other metal, such as platinum, rhodium, or iridium, which alone could raise its specific gravity above that of gold.

BARCLAY V. HEAD.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

Bulletin de Correspondance Hellénique, 1888, p. 405.

J. N. Svoronos. Sur les Λέβητες (espèce de monnaies de Crète) et la date de la grande inscription contenant les lois de Gortyne.

This interesting and ingenious article affords a striking example of the value of numismatic studies in elucidating obscure points which an archæologist, who is not also a numismatist, might be tempted to abandon as insoluble. The now famous inscription of Gortyna, which contains in archaic characters texts of the laws of Gortyna, was pronounced by M. D. Comparetti to belong to the sixth century B.C. M. Kirchhoff, on the other hand, argued that it was very much later and subsequent to B.C. 450. M. Comparetti, in support of his theory, cited some additional fragments of inscriptions, slightly more archaic in style of lettering than the large inscription, and on which the various fines and indemnities were fixed, not in staters, drachms, triobols, and obols, as in the great inscription, but in brazen tripods and caldrons (Λέβητες). M. Comparetti with apparent justice contended that as no coins with such types were ever struck in Crete, the inscriptions in question must date from a period before the introduction of money into the island, i.e. before *circ.* B.C. 650, and that the inscription of Gortyna, though undoubtedly somewhat later, was probably to be attributed to a period not very far removed, and not later than the close of the sixth century. At this point of the controversy M. Svoronos steps in with a new hypothesis, which appears to us to settle the question once for all in favour of M. Kirchhoff's opinion that all the inscriptions are later than the middle of the fifth century. M. Svoronos shows clearly that although there are no Cretan coins bearing the *type* of a Λέβης or of a tripod, there are nevertheless staters of no less than nine Cretan cities belonging to the fifth and fourth centuries which are frequently *counter-marked* with an object resembling nothing so much as a Λέβης, and in one instance he cites a tripod as a countermark. His theory is therefore that the Λέβητες and τρίποδες of the inscriptions signify in fact these countermarked coins, the countermarks in question having been placed upon the coins of different Cretan towns with the express object of making them legally current throughout the entire island. It is probable that no one but a numismatist who, like M. Svoronos, had

made a special and minute study of the Cretan series, could have ever lighted upon this highly interesting little discovery, and he is, in our opinion, to be congratulated on having finally settled the disputed point of the date of this important Gortyna inscription.

B. V. HEAD.

Études Archéologiques et Numismatiques, par Jean N. Svoronos. 1^{er} fascicule. Ulysse chez les Arcadiens et la Télégonie d'Eugammon à propos des types monétaires de la ville de Mantinée. Paris. 1889. (A. Lévy.)

This most interesting memoir will be welcome to a wider circle of scholars than purely archæological or numismatic articles can be expected to appeal to; for, dealing as it does with the adventures of Odysseus subsequent to the close of the Odyssey, every serious student of Homer and of the poets of the Homeric cycle will be bound to take cognisance of M. Svoronos's researches.

It will be remembered that after the slaughter of the suitors Odysseus tells Penelope how Tiresias had bidden him fare to many cities of men, carrying an oar on his shoulder, until he should come to a land where men knew not the sea nor had any acquaintance with ships, in token of which he should fall in with a wayfarer who should tell him that he carried on his shoulder a *winnowing fan*, whereupon he should plant his oar in the ground and do sacrifice to Poseidon and the deathless gods. (*Od.* xxiii. 262, and xi. 121.)

Up to the present no commentator has succeeded in identifying the country alluded to by Homer. It has been, as it now appears, wrongly supposed by the scholiast Eustathius and others that Odysseus met his wayfarer in Epirus. M. Svoronos, however, after a careful examination of the summary which Proclus gives of the lost epic of Eugammon of Cyrene, entitled *Telegonia*, in which the later adventures and the death of Odysseus are related, shows that this incident cannot have occurred in Epirus. The indications all point not to Epirus, but to Arcadia as the land whose inhabitants knew not the sea.

M. Svoronos clinches his arguments by interpreting most satisfactorily the hitherto unexplained types of certain coins of Mantinea in Arcadia (Head, *Hist. Num.* p. 376), on which there can be no longer the slightest doubt that the so-called fisherman armed with a harpoon is no other than Odysseus himself in the act of fixing his oar in the ground before sacrificing to Poseidon. The altar on the reverse of the coins in question is that of Poseidon **Avaξ* surmounted by the busts of the Dioskuri, surnamed *ἀνακτες* and *σωτῆρες*, whose function it

was to minister to Poseidon by saving mariners in peril of death. (Cf. Lucian, ed. Jacobitz, i. 116, προστάταται (τοῖς Διοσκούροις) ὑπηρετεῖν τῷ Ποσειδῶνι.)

Odysseus is represented on the coins as clad in the peculiar garb of those who descended into the cave of the seer Trophonius, at Lebadeia in Boeotia; and it is probable that in the *Telegonia* Odysseus was made to consult that prophet as to whither he should direct his steps to find the people who knew not the sea, and that by Trophonius he was advised to betake himself to Arcadia.

With regard to the date of the coins of Mantinea bearing types referring to the Odysseus myth, M. Svoronos is of opinion that they were struck immediately after the battle of Leuctra, B.C. 370, when the city of Mantinea, which had been razed to the ground by the Spartans in B.C. 385, was restored under the auspices of Epaminondas and his victorious Thebans.

B. V. HEAD.

The *Revue Numismatique*, 1888, Pt. IV., contains the following articles:—

1. E. Babelon. Marathus. The writer gives a careful summary of the little that is known of the history of this Phœnician city. Numismatists from Eckhel's time down to the present have taken for granted that the era according to which the coins of Marathus are dated is identical with that of the mother and rival city Aradus (B.C. 259—8). M. Babelon, from a comparison of the dates on the coins with the portraits of Egyptian monarchs, which some of them bear, shows that this is an untenable proposition. He cites and engraves coins bearing the heads of Arsinoë I., dated year 84, of Berenice II., year 78, of Ptolemy III., years 85—87, and of Arsinoë III., years 100—108, from which it is apparent that the era is calculated from B.C. 312. On no other hypothesis can the presence of these portraits on the coins be accounted for. Unless, therefore, we reject *in toto* the theory that the veiled heads are portraits of Egyptian queens, we are constrained to accept M. Babelon's view as to the date of the era of Marathus. The dated coins extend in an almost unbroken series from B.C. 282 to B.C. 164, after which there is a long break of 88 years, followed by an isolated coin bearing the date 236 (= B.C. 76). This period of inactivity corresponds roughly with the time during which Marathus, after its destruction by its rival Aradus, in the reign of Alexander Bala, may be supposed to have been deprived of its autonomy. The most remarkable coins described by M. Babelon are two tetradrachms, one of which is identical with that figured in Head, *Hist. Num.*, p. 670. *Obv.* Turreted head

of the city; *rev.* Naked male figure seated on two shields, holding aplustre and branch, dated year 33; and the other of the same type, but of later style, dated in Greek numerals, year 89. The seated figure is identified by the writer with Marathos, the eponymous hero of the town, and the branch which he holds with the plant *marathrum*, famed for its medicinal properties.

2. E. Taillebois. On ancient countermarks, supplementary to M. Arthur Engel's paper on the same subject in the *Revue Numismatique* for 1887. The countermarked coins here described consist for the most part of consular and imperial denarii. The writer is of opinion that countermarks served as a rule the purpose of distinguishing coins of good metal and weight from worn and light money, thus giving them a new lease of currency.

3. M. Prou. On Merovingian Mints.

4. F. Mazerolle. On Gros Tournois and Deniers Parisis, struck in the sixteenth century.

5. L. Germain. On a medallion of Pierre Joly (Petrus Lepidus), Procureur-General of Metz, *ob.* 1622, by Jean Richier.

6. E. Zay. On French colonial coins.

B. V. HEAD.

F. Imhoof-Blumer. *Antike Münzbilder. Jahrbuch des K. deutschen Archäologischen Instituts*, 1888. Heft. IV.

Dr. Imhoof's papers are always valuable contributions to the study of Greek coins, and this one, notwithstanding its brevity, is no exception to the rule. It is divided into five sections: (i.) *Praying and begging figures*, distinguished by the characteristic attitude of the raised hands. One of the best examples of this type is afforded by the beautiful gold stater of Tarentum, on which the youth Taras is seen standing before his father Poseidon in the attitude of prayer. (ii.) *Myths of Zeus*. The selected specimens in this section are two imperial coins of Laodiceia in Phrygia, bearing subjects illustrating the infancy of Zeus; probably copied from wall paintings in the temple of Zeus at Laodiceia. On one of them Rhea is seen on her knees holding the infant in her arms; before her, with his arm round a tree, sits the mountain divinity Kadmos, while the nymph Adrasteia approaches from behind. From a rock beneath the tree issues a mountain torrent. On the other coin Adrasteia carries the infant god, while around are three Corybantes beating their shields: in the foreground are two recumbent river gods, probably the Kapros and the Lykos, and in the background a third figure, perhaps the Genius of the town. (iii.) *The Judgment of Paris*, illustrated by imperial coins of Scep sis, Ilium, Tarsus, and

Alexandria. (iv.) The Foundation Myth of Ephesus: coins showing the mountain god Pion accompanied by his name, ΠΕΙΩΝ, and the wild boar pierced by an arrow, running along a mountain ridge, referring to the story of the foundation of Ephesus, related in *Athenaeus*, viii. 361. (v.) Mountain Divinities and Nymphs on Coins of Synnada and Docimeum in Phrygia and Cyzicus in Mysia.

B. V. HEAD.

Tier- und Pflanzenbilder auf Münzen und Gemmen des Klassischen Altertums, von IMHOOF-BLUMER und OTTO KELLER. With twenty-six Plates. Leipzig. 1889.

The joint authors of this interesting series of representations of animals and plants on ancient coins and gems have endeavoured not so much to give a complete and exhaustive catalogue of all the known varieties of each type, as to select the best and most characteristic and to group them scientifically in their various classes, such as mammalia, birds, amphibia and reptiles, fishes, insects, crustacea, plants, and lastly fabulous beasts and mixed creatures, such as the griffin, the sea-horse, and the chimæra. The plates contain in all as many as 1352 figures of coins and gems from all parts of the ancient world, giving for the most part excellent representations of between four and five hundred species. While such a work as this cannot fail to be of great interest to the student of natural history, it will be equally if not more useful to the archæologist, who is often at a loss for want of points of comparison to name correctly the smaller and less well-marked varieties. Numismatists will be especially grateful for the help these beautiful plates will afford them in the task of naming the little symbols consisting of shells, plants, birds, fishes, &c., which are so frequently met with in the field of Greek coins.

B. V. HEAD.

Catalogue of Greek Coins in the British Museum. Corinth and Colonies of Corinth, by B. V. HEAD. 1889.

We take the opportunity of the appearance of this volume of the Museum Catalogue by our Secretary, Mr. B. V. Head, to call the attention of Members of the Society to the fact that the European half of the National Collection is now fully catalogued, in ten volumes, each of which is complete in itself and deals with the coinage of a separate district. The compilers have now set to work upon the second or Asiatic half of the collection, which it is estimated will occupy at least as many volumes as the European. A commencement of this second section was

made some years ago by Professor Gardner, in his volume on the coinage of the Seleucidæ. Professor Poole's volume on the Ptolemies may be said to occupy the intermediate district between Europe and Asia. The titles of the volumes which have appeared up to the present time are, in geographical order, as follows:—

I. Italy. By R. S. Poole, B. V. Head, and P. Gardner	1873
II. Sicily. By the same	1876
III. Thrace, &c. By B. V. Head and P. Gardner	1877
IV. Macedon. By B. V. Head	1879
V. Thessaly to Epirus. By P. Gardner	1883
VI. Central Greece. By B. V. Head	1884
VII. Attica-Megaris-Agina. By B. V. Head	1888
VIII. Corinth and Colonies of Corinth. By B. V. Head	1889
IX. Peloponnesus. By P. Gardner	1887
X. Crete and the Islands. By W. Wroth	1886
XI. The Seleucidæ. By P. Gardner	1878
XII. The Ptolemies. By R. S. Poole	1883
	Ed.

MISCELLANEA.

RECENT SALES.—On Monday, 19th November, 1888, and seven following days, Messrs. Sotheby, Wilkinson, and Hodge sold at their rooms the extensive collection of Early British, Anglo-Saxon, English, Scottish, Irish, Anglo-Gallic, and Byzantine coins, which had been formed by the Hon. Robert Marshall, F.S.A. As the collection included many varieties from the Devonshire, Thomas, Durrant, Cuff, Wigan, Murchison, Bergne, and other well-known cabinets, there was a large assemblage of buyers, and the prices realised throughout may be considered very high. The following were amongst the more important lots:—*Early British*, Tasciovanus, *N*, rev. horseman to left, with sword and shield, £13; Epaticcus, *A*, head of Hercules, rev. eagle standing on serpent, £17. *Anglo-Saxon*, Pennies, Baldred, rev. cross, with pellets in the angles in centre of a circle, £21 5s.; Offa, bare-headed bust to right, rev. moneyer's name in the angles of a lozenge containing a floral ornament, £23; another, the king's name between two semicircular tablets, rev. moneyer's name in two lines, above, cross, &c., £21; Cynethryth, Queen of Offa, diademed bust to right, £25 10s.; Ciowlf II., diademed bust to right, large cross-crosslet with lozenge centre, £16 10s.; Regnald, circle enclosing cross, rev. moneyer's name in three lines, £15 10s.; Edward

the Elder, small cross in double circle, rev. a water-lily issuing from a line with star at each end, £17; another, rev. a church, £19. *English*, Pennies, William I., profile bust with sceptre, rev. double cross in square, £32 5s.; Henry I., three-quarter face bust to left, with sceptre, arched crown, rev. cross fleury in square floriated at ends, £18 5s.; Stephen and Matilda, two figures holding between them a standard, rev. ornaments, £17 10s.; Matilda, crowned bust to right with sceptre, rev. cross within eight curves, £21; Robert, Earl of Gloucester, mailed figure on horseback with sword, rev. ornaments, £16 10s.; Earl of Warwick, bust to right with sceptre, rev. cross within eight curves, £26 10s.; Henry IV., noble, £32 10s.; Richard III., London halfpenny, £15; Henry VII., sovereign, king on throne with high back, but without a canopy, and the pillars on either side surmounted by a greyhound and a dragon, rev. shield on rose, £40; the "Septim" groat, £22 10s.; Henry VIII., George noble, £34 10s.; double sovereign of the first coinage, king seated on a high-backed throne ornamented with chequers, a portcullis at his feet, rev. shield in centre of double rose, £116; Edward VI., "fine" sovereign (third coinage), king in long robes, seated, £40; angel of third coinage, £62; pattern crown, *A*, bust in armour, rev. crowned rose between E.R., £35 10s.; Mary, ryal, £30 10s.; Elizabeth, ryal, £26 10s.; pattern milled half-crown, *A*, £44; milled sixpence, 1574, £27; James I., spur ryal, £20 15s.; half-crown, *A*, EXVRGAT DEVS, &c., £31 10s.; Oxford pound piece, 1644, *A*, rev. declaration in a compartment surmounted by a lion's head, £29; Exeter half-crown, 1644, £23 10s.; another, similar, with no arms under the horse, £35; York half-crown, struck on a square piece of metal, £25. (Siege pieces) Beeston eighteen-pence, £36; Beeston shilling, £30; another, £25 10s.; Scarborough five-shilling piece, square, £44; Scarborough shilling, hexagonal, £31; Scarborough sixpence, octagonal, £21 5s.; another, hexagonal, £12 5s.; Cromwell, fifty-shilling piece, 1656, £180; half broad of same date, £40; two-shilling piece, 1658, *A*, £32; ninepence, 1658, £15 10s.; Charles II., the petition crown, by Thomas Simon, £290; Anne, "Vigo," five-guinea piece, 1703, £41 10s.; guinea of same year and type, £12 5s.; George II., five-guinea piece, 1731, £40 10s.; George III., pattern five-sovereign piece, by Pistrucci, 1820, £80; pattern five-guinea piece, by Yeo, £51 10s.; William IV., pattern crown, 1831, £23; Richard II., Anglo-Gallic half hardit, £75; James VI., Scottish twenty pound piece, 1575, £62; old Pretender, pattern guinea, 1716, £40 10s. (Irish Siege pieces) Exchequer ninepence, £23 10s.; Exchequer sixpence, £19 10s.; Exchequer groat, £17 10s.; Charles II. Dublin crown, £17 10s., &c.

III.

GREEK COINS ACQUIRED BY THE BRITISH MUSEUM IN 1888.

DURING the year 1888 (Jan.—Dec.) the Department of Coins in the British Museum has acquired, chiefly by purchase, 455¹ coins of the Greek class, 10 of which are gold and electrum, 217 in silver, and 228 in bronze. A description of noteworthy specimens among these acquisitions is given in the following pages.

METAPONTUM (LUCANIA).

1. *Obv.*—Tripod.

Rev.—**M** [E]. Corn-grain.

Æ. Size .5.

Of the period *circ.* B.C. 350—272. It is not described in the *Brit. Mus. Cat., Italy*, nor in Garrucci's *Monete dell' Italia antica*.

HIPPONIUM (BRUTTI).

2. *Obv.*—Head of Rheôn (?) r., horned, bare; in front
P [EΩN].

Rev.—**E I P Ω** [NIEΩN] Club bound with fillet.

Æ. Size .45. [Pl. XII. 1.]

¹ This total does not, of course, include the coins of the Cunningham Collection (Bactrian, Indian, &c.), purchased by a special Parliamentary grant during the past year. This very important acquisition will probably be dealt with separately in a future number of the *Numismatic Chronicle*. The Greek acquisitions of the Department of Coins during 1887 were described by the present writer in the *Numismatic Chronicle* for 1888, pp. 1—21.

Circ. B.C. 330—325. Not in *Brit. Mus. Cat., Italy*. A similar specimen is published by Dr. Imhoof-Blumer (*Monnaies grecques*, p. 8, No. 33; Pl. A, 8). The name of the river-god (which is not elsewhere mentioned) is wrongly read by Garrucci (*Mon. dell' It.*, p. 167, Nos. 14, 15) as **ΛΙΠΕΩΝ**.²

PANTICAPAEUM.

3. *Obv.*—Head of Pan r., beardless.

Rev.—**ΠΑΝΤΙ** (in'exergue). Lion seated r., looking r.: the whole in slight circular incuse.

Æ. Size .65. Weight 37.9 grains. [Pl. XII. 2.]

Fourth century B.C. Not described in *Brit. Mus. Cat., Tauric Chersonese*, &c. It is similar to a specimen figured in Burachkov, *Cat. of Coins of Olbia*, &c., Pl. XX. Fig. 82.

MARONEA (THRACE).

4. *Obv.*—Forepart of prancing horse l.; border of dots.

Rev.—Incuse square, quartered.

Æ. Size .5. Weight 27.6 grains.

Circ. B.C. 500—450. This hemidrachm is not described in *Brit. Mus. Cat., Tauric Chers.* It is similar to a specimen described by Dr. Imhoof-Blumer, *Zeit. f. Num.*, III. p. 283, No. 14; Pl. VI. 17; and to specimens in the Berlin Collection (Von Sallet, *Beschreibung I.*, p. 175, Nos. 3—5).

AMPHIPOLIS (MACEDONIA).

5. *Obv.*—Head of Apollo, three-quarter face towards l., laureate; in field l., crab.

Rev.—**ΑΜΦΙΠΟΛΙΤΕΩΝ** enclosed in linear frame. Race-torch: the whole in incuse square.

Æ. Size 1. Weight 220 grains. [Pl. XII. 3.]

² Corrected by Imhoof-Blumer in *Num. Zeit.*, 1886, p. 234.

Circ. B.C. 424—358. A fine tetradrachm on which the sleepy, Medusa-like character of the Apollo head is especially remarkable. The coin closely resembles one already in the British Museum (*Cat. Macedonia*, p. 44, Amphipolis, No. 4), but is better preserved.

ALEXANDER THE GREAT.

One hundred and forty-seven silver coins with the types of Alexander have been added to the collection during 1888. Of these many are specimens or varieties not described in Müller's *Num. d'Alex. le Grand*. A list of them has been furnished to Dr. Imhoof-Blumer for publication in the new *Corpus* of Greek coins.

THESSALIAN CONFEDERACY. (B.C. 196—146.)

6. *Obv.*—[Φ]ΙΛΟΚΡΑ ΤΟΥΣ. Head of Apollo r., laureate.

Rev.—ΘΕΣΣΑ ΛΩΝ. The Thessalian Pallas Itonia r., hurling spear held in r.; in l. shield. Beneath, ΠΕΤΡΑΙΟ; above [ΜΙ ?]Μ.

Æ. Size .7.

Not in *Brit. Mus. Cat., Thessaly* (cp. p. 5, No. 60).³

7. *Obv.*—ΙΣΑΓΟΡΟΥ. Head of Pallas r., helmeted.

Rev.—ΘΕΣ ΣΑΛΩ Ν. Rider on horse trotting r.

Æ. Size .8.

Not in *Brit. Mus. Cat., Thessaly*.⁴

THESSALY (TIME OF AUGUSTUS).

8. *Obv.*—ΣΕΒΑ ΣΣΑΛΩΝ. Veiled head l. (J. Cæsar).⁵

³ On the name Philocrates, see Monceaux, "Fastes éponymiques de la ligue Thess.," in *Rev. Arch.* 3rd ser., xii. p. 317.

⁴ On Isagoras, see Monceaux, *op. cit.* p. 316.

⁵ Possibly the head of Livia.

Rev.—**ΑΝΤΙΓΟΝΟΥ ΣΤΡΑΤΗΓΟΥ**. Female figure (the nymph Larisa ?) standing l., wearing chiton with diplois, hair tied in bunch behind; r. hand raised, holding ball; l. hand at side.

Æ. Size 1·1.

Not in *Brit. Mus. Cat., Thessaly*.

CRANNON (THESSALY).

9. *Obv.*—Thessalian horseman, wearing chlamys and petasus, on horse galloping l.

Rev.—**[K]PAN**. Bull butting r.; above, trident r.

Æ. Size ·6.

A specimen in the *Brit. Mus. Cat., Thessaly*, p. 16, No. 2, is similar to this, but has the horseman riding r.

LARISSA (THESSALY).

10. *Obv.*—**ΘΕΣΣΑ ΑΩΝ**. Heraklos naked seated l. on rock, looking back; l. arm supported by club; r. hand resting on his head.

Rev.—**ΛΑΡΙΣΑ**. Nymph Larisa, wearing chiton, standing l.; r. raised, l. at side.

Æ. Size ·6. [Pl. XII. 4.]

11. Similar types, with inscriptions **ΘΕΣΣ ΑΛΩΝ**, and **ΛΑΡΙ[Σ]Α**.

Æ. Size ·6.

After B.C. 146. For similar coins see *Berliner Blätter*, I. 1863, pp. 138, 139, Pl. V. 2; *Zeit. für Num.*, I. p. 182; Head, *Hist. Num.* p. 255. These coins are not in the *Brit. Mus. Catalogue, Thessaly*.

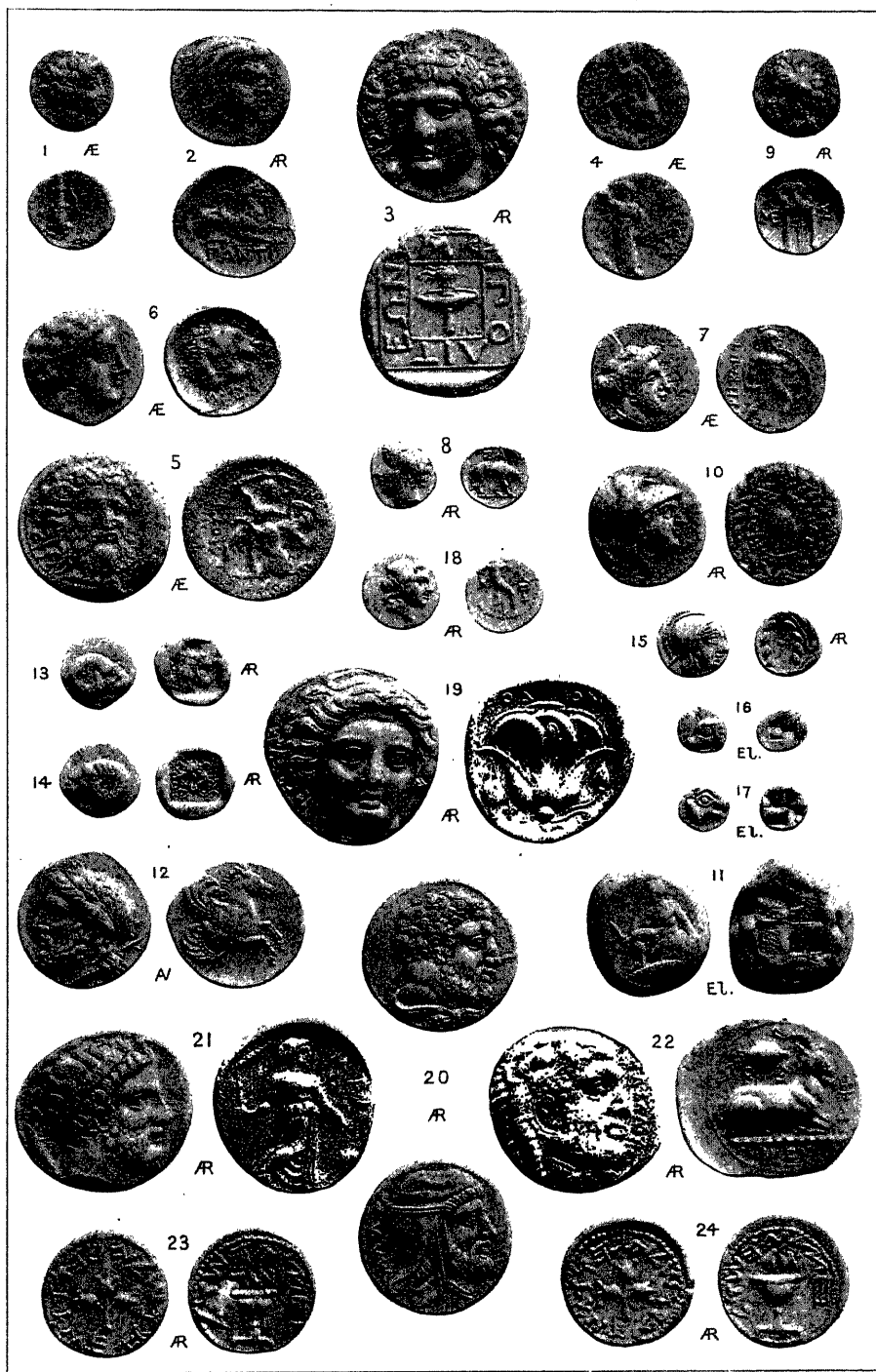
MELITAEA (THESSALY). Circ. B.C. 350.

12. *Obv.*—Head of Zeus l., laureate.

Rev.—**Μ Ε** Bee (μέλιττα).

Α Ι

Æ. Size ·6.



Melitaea was not represented in the *Brit. Mus. Cat., Thessaly*. This coin is similar to Prokesch-Osten, *Inedita*, 1854, Pl. I., Fig. 34.

MOPSIUM (THESSALY).

13. *Obv.*—Head of Zeus, three-quarter face, towards r., laureate; on r., thunderbolt.

Rev.—**ΜΟΨΕΙ ΩΝ.** Mopsus, naked, standing r. striking, with sword held in r., at Centaur, whom he forces back on his haunches with l. hand grasping his neck; Centaur prepares to hurl missile (stone or hydria?) held in both hands.

Æ. Size .8. [Pl. XII. 5.]

B.C. 400—344. Compare Imhoof-Blumer and Keller, *Tier-bilder*, Pl. XI. 42 (in the Imhoof-Blumer collection); Head's *Historia Numorum*, p. 257 (from the *Monatsber. d. Berl. Akad. d. Wiss.*, 1878); *Bulletin de Corr. hellénique*, V. p. 294; Pl. II. 7 (Muret).⁶ The antagonist of the centaur is the Lapith Mopsus, from whom the town of Mopsium derived its name (Strabo, ix. cap. 5, § 22). The obverse head has been called Mopsus, but the thunderbolt beside it shows that Zeus is intended. The head is treated in a rich, decorative style characteristic of other Thessalian coins. The reverse design resembles in several points one of the finest Parthenon metopes in the British Museum (No. 6). "In this metope the Lapith presses forward, advancing his left hand to seize the rearing centaur by the throat and forcing him on his haunches; the right arm of the Lapith is drawn back as if about to strike; his right hand, now wanting, probably held a sword." (Newton, *Guide to the Elgin Room*, Part I. metope 6; see also *Descript. of Anc. Marbles in Brit. Mus.*, vii. Pl. III.;

⁶ See also Pellerin, *Recueil*, I. Pl. XXVIII. fig. 93.

Michaelis, *Der Parthenon*, Pl. III., vii.; Waldstein in *Journ. Hell. Stud.*, III. p. 228 f.). On the metope the right arm of the Lapith is lowered, and he is represented in "the attitude of forward impulse." On the coin the Lapith is just in the act of striking at his antagonist. On the metope the centaur endeavours with one hand to loosen the grasp of the Lapith, and with the other (given in Carrey's drawing) grasps the left hand of the Lapith. On the coin the centaur holds in his upraised hands a missile which is a huge stone or perhaps a hydria such as is seen in a centaur's hand on the British Museum metope No. III. (*Descript. Anc. Marb.* vii. Pl. 7). Metope 11 in the British Museum (*Descript. Anc. Marb.*, vii. Pl. 8) is also recalled by the design on our coin.

PHARSALUS (THESSALY).

14. *Obv.*—Head of Pallas r., helmeted..

Rev.—Φ Α Ρ Ξ. Horse's head r.

Æ. Size .45.

Not in *Brit. Mus. Cat.*, *Thessaly*. (Cp. Leake, *Num. Hell. Sup.*, p. 140, No. 1.) It belongs to the period B.C. 400—344, of which there are silver coins with similar types (*Cat. Thessaly*, p. 44, No. 18).

PHERÆ (THESSALY).

15. *Obv.*—Female head (Hecate?) r., wearing wreath (of laurel?) and ear-ring.

Rev.—ΦΕΡΑΙ ΟΝ. Lion's head fountain, r.; water issuing from mouth.

Æ. Size .6. [Pl. XII. 6.]

B.C. 450—400. Resembles the specimen in *Brit. Mus. Cat.*, *Thessaly* (p. 47, No. 12, Pl. X. 9), but the head is different.

TRICCA (THESSALY).

16. *Obv.*—Head of the nymph Tricca r., wearing ear-ring and necklace; hair rolled.

Rev.—ΤΡΙΚΚΑΙΩΝ. Naked warrior (Podaleirius or Machaon?) advancing r., wearing helmet; in r., sword; in l., shield.

Æ. Size .6. [Pl. XII. 7.]

B.C. 400—344. The specimen in *Brit. Mus. Cat., Thessaly*, p. 52, No. 16, has similar types.⁷

SAME (CEPHALLENIA).

17. *Obv.*—Head of Apollo l., laureate.

Rev.—ΞΑ. Hound Laelaps r., scenting.

Æ. Size .85. Weight 10·4 grains. [Pl. XII. 8.]

B.C. 431—370. Cp. Gardner, *Brit. Mus. Catalogue, Peloponnesus*, p. 90, No. 2.

MESSENE.

18. *Obv.*—Head of Demeter l., wearing corn-wreath, ear-ring and necklace.

Rev.—ME Ξ. Tripod.

Æ. Size .5. Weight 14·7 grains. [Pl. XII. 9.]

B.C. 370—300. A very well-preserved specimen of the coin described in Gardner, *Brit. Mus. Cat., Peloponnesus*, p. 109, Nos. 2, 3.

LAS (LACONIA).

19. *Obv.*—ΛΟΥCΕΠΤ CΕΟVΗΡΟC. Head of Septimius Severus r., laur.

Rev.—ΑΑ Ω Ν. Artemis Dictynna r.; in l., bow; r., drawing arrow from quiver; in front, dog; behind, stag (?).

Æ. Size .85.

⁷ Cp. *Bull. de Corr. hell.* V. p. 299 (Muret).

Not in *Brit. Mus. Cat.*, *Peloponnesus*. Cp. Leake, *Num. Hell. Europ. Gr.*, p. 60, and Imhoof and Gardner, *Num. Comm. on Pausanias*, p. 65, No. 4; Pl. 0, xxi.

ARGOS.

20. *Obv.*—**ΟΥΗΡΟΣ** [**ΑΥΓΟΥΣΤΟΣ** ?]. Bust of L.
Verus r., laur.

Rev.—**ΑΡΓΕ ΙΩΝ**. Pallas standing r., hurling spear with r.; in l., shield.

Æ. Size .75.

Not in *Brit. Mus. Cat.*, *Peloponnesus*. For other types of Pallas at Argos see Imhoof and Gardner, *Num. Comm. on Pausanias*, p. 39; p. 160.

PHIGALEIA (ARCADIA).

21. *Obv.*—**ΙΟΥΛΙΑ ΔΟΜΝΑ**. Bust of Julia Domna r.

Rev.—**ΦΙΛΑ ΛΕΩ** [N ?]. Asklepios standing facing, head l.; in r., snake-encircled staff.

Æ. Size .9.

Not in *Brit. Mus. Cat.*, *Peloponnesus*. Cp. Mionnet, *Sup. IV.* p. 289, No. 94.

CNOSSUS (CRETE).

22. *Obv.*—The Minotaur running r.; l. hand raised, holding (stone ?).

Rev.—Star of eight rays within linear square; the whole in incuse square.

Æ. Size .4. Weight 14.4 grains.

Not in *Brit. Mus. Cat.*, *Crete*, &c.

MELOS.

23. *Obv.*—Head of Pallas r., helmeted.

Rev.—**ΜΑΛΙΩΝ ΔΕΞΙΚΡΑΤΗΣ**. Pomegranate; the whole in olive-wreath.

Æ. Size .7. Weight 59.1 grains. [Pl. XII. 10.]

A rare drachm of the third century B.C., not described in the *Brit. Mus. Cat., Crete and Aegean Islands*. Other Melian silver coins with magistrates' names, of the same period, are given in Head's *Historia Numorum*, p. 415.

CYZICUS (MYSIA).

24. *Obv.*—Bearded male figure (Orestes at Delphi?) wearing chlamys which hangs behind, kneeling l. beside the omphalos, on which his left hand rests; in r., naked sword, upright; beneath, tunny l.

Rev.—Incuse square of four square sinkings.

El. Size .7. Weight 248.2 grains. [Pl. XII. 11.]

A similar specimen is in Canon Greenwell's collection, and is described by him in his *Coinage of Cyzicus*, p. 87, No. 72, Pl. III., 23. A *hecte* with similar types is in the British Museum.

25. *Obv.*—**KV ZIKOC**. Youthful male head r. (Cyzicus); beneath, serpent.

Rev.—**ΑΣΚΛΗΠΙΑΔΟΥ ΚΥΖΙΚΗΝΩΝ ΝΕΟΚ**. Nemesis, winged, wearing helmet, chiton and peplos, standing l.; r. hand on rudder; at her feet, wheel.

Æ. Size .95.

Compare Mionnet, tom. ii. p. 534, No. 140. The coin is of the time of Gallienus, the same magistrate's name occurring on his coins (Mion. Sup. t. v. p. 353, Nos. 460, 461).

LAMPISACUS (MYSIA).

26. *Obv.*—Head of Zeus l., laureate; behind, fulmen.

Rev.—Half sea-horse r., winged, in incuse square.

Æ. Size .75. Weight 180.5 grains. [Pl. XII. 12.]

B.C. 412—350. An unpublished—though not unique—stater. Another specimen with the head of Zeus is figured in the *Historia Numorum*, Fig. 279. The careful treatment of the hair recalls the Zeus heads on coins of Alexander of Epirus (Gardner, *Types*, Pl. V. 37), and of Metapontum (*Ib.* Pl. V. 40), but the head on this coin is of a sterner—if less pleasing—type.

27. *Obv.*—**ΑΥ ΑΝΤΩΝΕ** (inscript. partly obscure). Bust of Caracalla r., laur.

Rev.—**ΛΑΜΨΑ ΚΗΝΩΝ**. Cybele seated on throne l.; in r., patera; before her, lion.

Æ. Size .8.

Compare Mionnet, *Sup. t. v. p. 378*, No. 605.

CEBRENIA (TROAS).

28. *Obv.*—Ram's head r.

Rev.—Lion's head r. within incuse square.

Æ. Size .45. Weight 28.9 grains. [Pl. XII. 13.]

29. *Obv.*—Ram's head l.

Rev.—Gorgoneion within incuse square.

Æ. Size .45. Weight 31.5 grains. [Pl. XII. 14.]

Fifth century, B.C. A list of the coins of Cebrenia is given by Imhoof-Blumer in the *Zeit. f. Num.* III. 307 f. (cf. *Monnaies grecques*, p. 261). The lion's head reverse is not there described. The Gorgoneion reverse is given in Imhoof, *op. cit.*, p. 307, No. 7, and by Prof. P. Gardner in *Num. Chron.*, 1886, p. 255, No. 10, where several coins of Cebrenia, acquired by the British Museum at the Whit-tall sale in 1885, are described.

ELAEA (ÆOLIS).

30. *Obv.*—Head of Pallas r., wearing crested helmet.

Rev.—Olive-wreath; in centre, pellet.

Æ. Size .35. Weight 21 grains. [Pl. XII. 15.]

Fifth century B.C. Similar to Imhoof, *Monnaies grecques*, p. 273, No. 228.

METHYMNA (LESBOS).

31. *Obv.*—ΑΥΚΑΙΜΑ ΠΑΥΠΑΝΤΩΝΙΝΟC. Bust of Caracalla r., laur.

Rev.—Μ Η Θ Υ Μ Ν Α Ι Ω Ν. Bust of Pallas r., wearing helmet and ægis.

Æ. Size 1.35.

EPHESUS (IONIA).

32. *Obv.*—[Ε Φ. Bee; border of dots.

Rev.—Incuse square quartered by two broad bands, on one of which, ΗΡΟΓΝΗΤ.

Æ. Size .45. Weight 25.4 grains.

33. Similar to No. 32, but with magistrate's name, ΞΙΜΟΞ.

Æ. Size .45. Weight 26 grains.

34. *Obv.*—[Ε Φ off the flan]. Bee; border of dots.

Rev.—[Ε Κ]ΑΤΟΚΑ (on r.). Forepart of stag r., looking back; behind, palm-tree.

Æ. Size .9. Weight 230.5 grains.

Nos. 32 and 33 are of the period B.C. 415—394, and No. 34 of the period B.C. 387—295. They are not described in Head's *Coins of Ephesus* (cp. Pl. I. 20; p. 24, and Pl. II. 10., p. 37).

LEBEDUS (IONIA).

35. *Obv.*—**ΑΔΡΙΑΝΟC CΕΒΑΚΤΟC**. Head of Hadrian r., laur.

Rev.—**ΑΕΒ Ε ΔΙΩΝ**. Pallas standing l.; in r., spear; l. on shield; before her, owl.

Æ. Size .8.

PHOCAEA (IONIA).

B.C. 600(?)—560.

36. *Obv.*—Head of seal l.

Rev.—Incuse square rudely quartered.

El. Size .25. Weight 9.9 grains ($\frac{1}{34}$ stater, Phocaic weight). [Pl. XII. 16.]

37. *Obv.*—Head of seal r.

Rev.—Incuse square rudely quartered.

El. Size .25. Weight 9.4 grains. [Pl. XII. 17.]

CAUNUS (CARIA).

38. *Obv.*—Youthful male head r., diademed.

Rev.—**Κ Χ**. Cornucopiæ; in field r., crux ansata; border of dots.

Æ. Size .4. Weight 14.1 grains. [Pl. XII. 18.]

This coin was presented by Mr. J. Theodore Bent, by whom it was found in a grave on the site of Lissa or Karya, about ten miles distant from the Lycian city of Lydæ.⁸ The British Museum also possesses the following coins of Caunus, acquired in former years:—

⁸ See J. T. Bent, in *Journ. Hellenic Stud.*, 1888, p. 85. The engraving of this coin there given is unsatisfactory.

a.—Types and inscription same as No. 38, but without crux ansata and border of dots.

Æ. Size .45.

b. Obv.—Head of Pallas r., helmeted.

Rev.—**Κ Χ**. Cornucopiæ.

Æ. Size .65.

c. Obv.—Head of Pallas r., helmeted.

Rev.—**ΚΤΗ ΤΟΣ**. **Κ Χ**. Sword in sheath; in field, l., bucranium.

Æ. Size .4. Weight 17.4 grains.

d.—Types and inscriptions same as *c*; in field r. of reverse, caduceus.

Æ. Size .4. Weight 18.6 grains.

e. Obv.—Head of Pallas r., helmeted.

Rev.—**ΦΑ ΡΟΣ Κ Χ**. Sword in sheath; in field r., bunch of grapes.

Æ. Size .5. Weight 17.2 grains. (Engraved in Waddington, *Mélanges de Num.*, Pl. II. No. 3, p. 19, No. 1.)

f. Obv.—Youthful male head r., hair long (laureate?), (Apollo?).

Rev.—**Κ Χ**. Sword in sheath.

Æ. Size .45. Purchased at Huber's sale, 1862, Lot 610. (Cp. a specimen in the Waddington Collection, Waddington, *Mélanges*, I. Pl. II. 4; p. 19, No. 3.)

Coins of Caunus of the types *c*, *d*, *e*, *f* have been published by M. Waddington (*Mél. de Num.* I. p. 19; cp. Head, *Hist. Num.* p. 522), and are by him assigned to the second century B.C. The silver coin No. 38 and the corresponding specimen in bronze, *a*, are the earliest money

of Caunus at present known, and belong to the end of the fourth or the beginning of the third century B.C. The head on the obverse appears to be that of a king, and bears most resemblance to Alexander the Great. The cornucopiæ on the reverse is a Ptolemaic type, and the coins may therefore possibly belong to the time of Ptolemy I., who took Caunus in B.C. 309 (Diod. xx. 27).⁹ The bronze coin *b* (apparently unpublished) is of thick fabric and of coarser style than the bronze coin *a*. It is apparently the link between *a* and *c*, having the cornucopiæ of *a* and the Pallas-head of *c*. The small bronze coins with *obv.* butting bull (or forepart of bull), *rev.* sphinx seated and the inscription **Κ Α** or (as generally read) **Κ** $\begin{smallmatrix} \text{A} \\ \text{Υ} \end{smallmatrix}$, probably belongs to Caryanda, as suggested by Dr. Imhoof-Blumer (*Num. Zeitschrift*, 1884, p. 269, 270). A specimen in the French collection appears to Dr. Imhoof-Blumer to read **Κ** $\begin{smallmatrix} \text{A} \\ \text{Π} \end{smallmatrix}$ $\begin{smallmatrix} \text{A} \\ \text{Υ} \end{smallmatrix}$, and this also seems to me to be the reading of a similar specimen in the British Museum.¹⁰

RHODES.

B.C. 400—304.

39. *Obv.*—Head of Helios, three-quarter face r.

Rev.—**ΠΟΔ ΙΟΝ**. Rose with bud on r.; in field l., barley-corn and Φ ; the whole in incuse square.

\mathcal{R} . .95. Weight 238.6 grains. [Pl. XII. 19.]

⁹ Professor Poole points out to me, however, that the cornucopiæ does not occur with certainty on the Ptolemaic coins till the reign of Ptolemy III. The head on our coin is not that of Ptolemy III., nor does it resemble that of any one of the Ptolemies.

¹⁰ For an account of Caunus, see Waddington, *Mél. d. Num.*, I. p. 17 ff.; Collignon, in *Bull. Corr. hell.*, 1877, p. 338 ff.; Smith, *Dict. Geog.*, s.v. Caunus.

40. *Obv.*—Head of Helios, three-quarter face r.

Rev.—**POΔION**. Rose with bud on l.; in field r., human eye in profile; in field l., **A**: the whole in incuse square.

Æ. 9. Weight 233·3 grains.

MAGYDUS (PAMPHILIA).

41. *Obv.*—**Μ·ΑΥΡ·ΑΝ ΤΩΝΙΝΟC·CΕΒ**. Bust of Caracalla r., laur., wearing paludamentum and cuirass.

Rev.—**ΜΑΓΥ ΔΕΩΝ**. Zeus wearing himation seated r.; r. on sceptre; in l. thunderbolt.

Æ. Size 1·35.

On this coin, which is in a fair state of preservation, there appears to be no date, though a date usually occurs on the money of Magydus (cp. Waddington, *Voy. en Asie-mineure*, p. 91).

CONANE (PISIDIA).

42. *Obv.*—**ΦΑΥCΤΕΙΝ**[A?] **CΕΒΑCΤΗ**. Bust of Faustina junior, r.

Rev.—**KONANE ΩΝ**. Dionysos naked, standing l.; in r., kantharos; l. on thyrsos; before him, panther.

Æ. Size 9.

A similar reverse type occurs on a coin of Conane of Philip junior (Mion., Sup. t. vii., p. 113, No. 135).

PROSTANNA (PISIDIA).

43. *Obv.*—**[Π]ΟΛΙC**. Female bust r. (The City) turreted and draped.

Rev.—**ΠΡΟCΤΑΝ ΝΕΩΝ**. Poseidon wearing himation standing l.; in r., dolphin; l. on trident.

Æ. Size 75.

This coin, which is in good preservation, probably belongs to the time of Faustina junior, to whose face the features of the City on the obverse seem to be assimilated. A specimen with the same types is at Berlin, and was formerly in the Fox collection.¹¹ Sestini (*Lettere e dissert. num.* III. p. 94; Pl. II. Fig. 13) described a coin with similar obverse, and with reverse "Venus stolata ad s. stans; d. globum, s. hastam." This description is repeated by Mionnet, Sup. t. vii. p. 121, No. 156, and by Head, *Hist. Num.*, p. 591. The identical specimen published by Sestini was purchased from him by Mr. Thomas Burgon,¹² and is now in the British Museum. I am inclined to think that its type is Poseidon holding dolphin and trident, as on our coin, No. 43, though it may *possibly* be a female figure wearing the peplos. The object held in the right hand is not certain; the top part of the object held in the left hand is off the flan.

PARLAIS (LYCAONIA).

44. *Obv.*—ΑΥΤΚΑΙCΜΑ ΝΤΓΟΡΔΙΑ ΝΟCCEB.

Bust of Gordian III., r. laur., wearing paludamentum and cuirass.

Rev.—ΠΑΡΛΑΕΙΩΝ. Beneath tree wolf r., suckling Romulus and Remus.

Æ. Size 1.25.

The coins of Parlais hitherto published (see M. Waddington's descriptions in *Rev. Num.* 1883, p. 58 f.) range from M. Aurelius to Sept. Severus and J. Domna, and are all Roman colonial, with Latin inscriptions. This coin is

¹¹ Fox, *Engravings of Unedited, &c.*, part ii. p. 21, No. 123, Plate VI. fig. 123. *Rev.*, "male figure" holding "spear" and "what seems a dolphin."

¹² Burgon's MS. note in Brit. Mus.

interesting both as being of a later date, and as bearing an inscription in Greek. The reverse type, it may be noted, is one often found on *colonial* coins.¹³

MALLUS (CILICIA). B.C. 385—333.

45. *Obv.*—Head of bearded Herakles r.; round neck, lion's skin: border of dots.

Rev.—**MAA**. Head of bearded Satrap r., in Persian tiara.

Æ. Size .85. Wt. 158.8 grains. [Pl. XII. 20.]

This and the following coin (No. 46) were not known when Dr. Imhoof-Blumer published his valuable monograph on the coinage of Mallus (*Annuaire de Num.* 1883). A specimen of this coin, somewhat less well preserved, is in the Löbbecke collection, and is published in *Zeit. f. Num.*, xii., p. 333, No. 1; Pl. XIII. 12.

46. *Obv.*—Bearded male head r., wearing ornamented taenia; behind head, fish: border of dots.

Rev.—**MAA**. Demeter standing r., wearing chiton with diplois, and peplos; hair in sphendone; in r., torch; in l., ears of corn.

Æ. Size .95. Wt. 163.8 grains. [Pl. XII. 21.]

A similar specimen in inferior condition was acquired by the British Museum in 1885, and was published in the *Num. Chron.*, 1886, p. 263; Pl. XI., 19.¹⁴ Another specimen is in the collection of Mr. Löbbecke, who in publishing it (*Zeit. f. Num.*, xii., p. 333, No. 2; Pl. XIII. 13), has

¹³ A coin of Gallienus, once commonly supposed to read **ΠΑΡΛΑΙΩΝ**, belongs to Adraa, in Arabia Petraea (Muret, in *Annuaire de Num.*, iv. p. 221 f.).

¹⁴ This specimen has a barleycorn in the field behind Demeter.

described the symbol on the obverse as a *club*, though our well-preserved specimen, No. 46, shows that it is a fish. Mr. Löbbecke describes the head as that of Herakles, but it is not of a distinctly Heraklean character.

SOLI (POMPEIOPOLIS).

47. *Obv.*—ΑΥΤΚΙΟΥΦΙΛΙΤΤΤΟC ΕΥCCEB Π.

Bust of Philip II., r., radiate, wearing paludamentum, and cuirass.

Rev.—ΠΟΜΠΗ Ι Ο ΠΟΛ ΙΑΤ (year 311 = A.D. 245—246).¹⁵ Helios, radiate, standing l.; r., raised; in l., torch and chlamys.

Æ. Size 1.2.

CYPRUS. EVAGORAS I., B.C. 410—374.

48. *Obv.*—Εὐ . Φα . γό . ρω (in Cypriote characters). Head of bearded Herakles r., in lion's skin: border.

Rev.—Βα . σι . λέ . φω . ς (in Cypriote characters), and ΕΥ Α. Goat lying r.; above, barleycorn: border. Exergue formed by dotted line.

Æ. Size 1. Wt. 172 grains. [Pl. XII. 22.]

A fine specimen of a type described by M. J. P. Six in *Revue Num.*, 1883, p. 283, No. 5.

ANCYRA (GALATIA).

49. *Obv.*—ΑΝΤΩΝΕΙΝΟC ΑΥΓΟΝCΤΟC. Bust of Caracalla r., laur.; wearing paludamentum and cuirass.

Rev.—ΑΝΚΥ (in exergue) ΡΑC. Octastyle temple on four steps; in pediment, wreath; in exergue, anchor.

Æ. Size 1.15.

¹⁵ On the Era, see Imhoof-Blumer in *Zeit. f. Num.* x. p. 296.

· COMMAGENE. ANTIOCHUS IV., A.D. 88—72.

50. *Obv.*—ΒΑΣΙΛΕ .. ΑΝΤΙΟΧΟΣ. Bust of Antiochus IV. r., diademed. Countermarked with X?

Rev.—ΑΥΚΑΟΝΩΝ. Scorpion: the whole in wreath.

Æ. Size 1·05.

JUDAEA. HALF-SHEKEL. YEAR 3.

51. Similar to Madden, *Coins of the Jews*, p. 68, No. 6.

Æ. Size ·7. Wt. 109·7 grains. [Pl. XII. 23.]

HALF-SHEKEL. YEAR 4.

52. Similar to Madden, *Coins of the Jews*, p. 69, No. 7.

Æ. Size ·7. Wt. 108·4 grains. [Pl. XII. 24.]

WARWICK WROTH.

IV.

COINS OF THE TOCHARI, KUSHÂNS, OR YUE-TI.

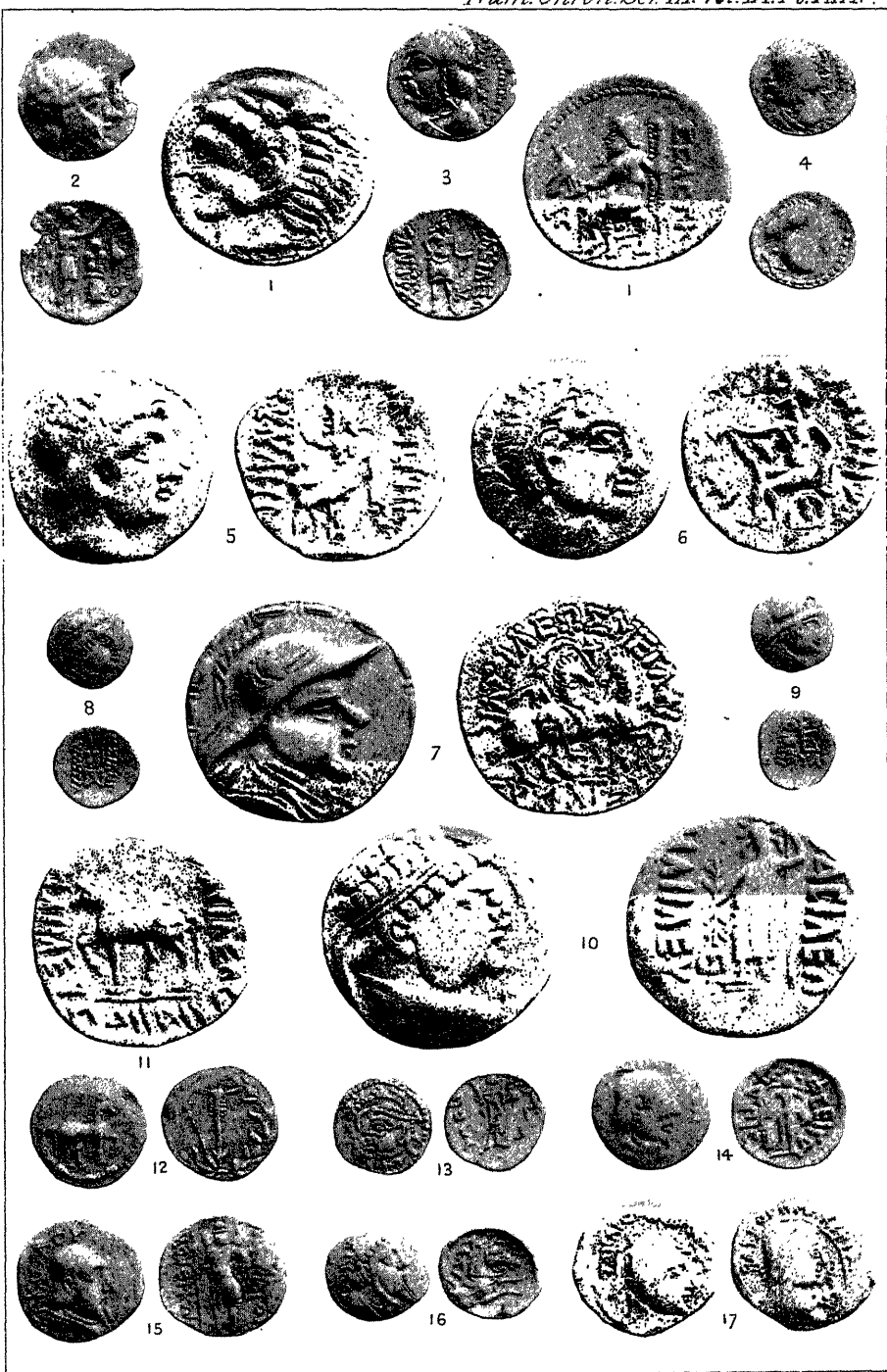
ACCORDING to Strabo the principal tribes of the Scythian conquerors of Bactriana were the Asii, the Pasiani, the Tochari, and the Sakarauli.¹ In the brief notices of Trogus, the Asiani and the Saranacæ are named as the conquering tribes. The first tribe, the Asiani or Pasiani of Strabo, is said to have given kings to the Tochari; and to have afterwards subdued the Sarduchæ.² In the first passage we may perhaps read *Saraucae*, and in the second *Sarauchæ*, both of which might be identified with the Sakarauli or Sagaraukæ of Strabo.

As the dates of Trogus and Strabo are limited to the period between B.C. 40 and A.D. 14, the Scythian occupation of Bactriana must be assigned to the second century B.C., while the union of the five tribes and the consequent aggrandisement of the Yue-chi (or Yue-ti) under the single rule of the Asiani (or Kushâns), cannot have taken place until near the close of the first century B.C.

We derive some further information about the Scythian conquest of the provinces on the Oxus from a few brief

¹ *Geogr.*, xi. 8, 2.

² *Prolog. Trogi*, xli.—“Scythicæ gentes Saranacæ et Asiani Bactra occupavere et Sogdianos.” *Prolog.*, xlii.—“Additæ res Scythicæ reges Thocarorum Asiani, interitusque Sarducharum.”



notices of other Chinese writers. According to them the Great *Yue-ti* on being driven across the Jaxartes by the Hiong-nu, occupied Sogdiana in B.C. 163, at which time the king of the Yue-ti was killed, and his skull made into a drinking-cup, that was still in use one hundred and fifty years later.³ The Yue-ti, under their widowed queen, gradually extended their dominions until they reached the south side of the Oxus, where they were found in full possession by the Chinese general Chang-Kian in B.C. 116. But their wars with the Hiong-nu were known in China before B.C. 126, when Chang-Kian's embassy was dispatched. This date is confirmed by the deaths of two Parthian kings in battle with the Scythians and Thogarii—the first, Phraates II. in B.C. 126, and the second, Artabanus in B.C. 123.

About one hundred years later, or say about 16 B.C., the chief of the Kushâns, having conquered the other four tribes of the Yue-ti, assumed the title of *King of the Kushâns*, and advancing to the south occupied *Kao-fu*, or Kabul. The name of this king was *Kieu-tsieu-khio*.⁴ He must therefore be the Kujula Kadphises of the coins, on which he takes the title of king of the *Korsan*, or the *Kushâns*, as written in the native legends of his coins. At first he would appear to have reigned jointly with the Greek king Hermæus, as both of their names are found together on one very numerous series of copper-coins of the Kabul valley.

Kieu-tsieu-khio is said to have reached eighty-four years of age, and the great abundance of his coins bears ample testimony to a very long reign. He probably reigned for

³ Remusat, *Nouv. Mélanges Asiat.*, i. 205.

⁴ Julien's translation in *Les Huns Blancs*, p. 43.

about forty-five or fifty years, or from B.C. 16 to A.D. 35. The consolidation of the five tribes of the Yue-chi under Kujula Kadphises has been generally accepted as dating from about one hundred years after Chang-Kian's embassy, which appears to have occupied about ten years, or from B.C. 126 to 116. But M. Specht, the last translator of the Chinese accounts, fixes the date at A.D. 25.⁵ But against this late date I can offer the very strong objection that in the year B.C. 2, the king of the "Great Yue-ti" is said to have sent a mission to China under *I-tsun-kiu* (? Asanga) with a Buddhist book.⁶ Now this king must certainly have been *Kujula*, who calls himself on his coins *Sacha-dharma-thida*, or "upholder of the true dharma." He must therefore have been a patron of Buddhism, and as he was the founder of the Kushân empire, and the immediate successor of the Greek Hermæus, he must have been the king of the Yue-ti who sent the Buddhist book to the Emperor of China in B.C. 2. His subjugation of the other four tribes of the Yue-ti, and consequent aggrandisement of the Kushân power, cannot therefore be placed later than about 10 B.C. I take his actual name to have been *Kujula*, or in Greek ΚΟΖΟΥΛΟ and ΚΟΖΟΛΑ, while *Kadaphes* or *Kadphises* was only a title, which I believe to mean simply the "good charioteer," as I find that *Kieu-teu-fa* is so translated by D'Herbelot.⁷

Kujula was succeeded by his son *Yen-kao-ching*, or *Yun-kao-chin-tai*, who is recorded to have conquered India, where he established his generals as governors of provinces.

⁵ *Indian Antiquary*, xv. p. 19.

⁶ Pauthier, in *Thian-chu*, p. 14.

⁷ *Bibliothèque Orientale*, 8vo, iv. 62.

I would identify this king with *Wema*, or *Hema Kadphises* of the coins, who certainly reigned over the whole of the Punjâb and North-West India, as proved by the numerous find spots of his coins. As *Yun* or *Yen* is only an interchangeable pronunciation with *Wen* or *Hen*, I take this king's name to have been simply *Wen*, while *Kadphises* was his title, as in the case of his predecessor. In corroboration of this view I can point to the unique gold coin of this prince on which he is represented driving in a chariot.⁸

Now this same name of *Wen* was that of the famous progenitor of no less than ten branches of the Yue-ti, who after a lapse of six centuries claimed an uninterrupted descent from the *Shaowu Wen*. This was in A.D. 610; but only twenty years later, or in A.D. 630, Hwen Thsang found that no less than twenty-seven chiefs of the *Tu-ho-lo* or *Tochari*, called themselves kings, while they were all tributary to the great Khan of the Turks.⁹ On the coins the name of this king is written **OOHMO** in Greek, and *Hima* in native characters.¹⁰ The Greek seems to represent *Wemo*. One or two of the coins have *Hema* in native characters; but the common form is *Hima*. As his coins are extremely common he must have had a long reign, say of forty years, from about 35 to 75 A.D.

After him the Chinese mention king *Kia-ni-se-kia*, or *Kanishka*, of whom we possess several inscriptions as well as numerous coins, both in gold and copper. The name

⁸ *Brit. Mus. Cat. Greek and Scythic Kings*, Pl. XXXII., fig. 13.

⁹ Beal's *Hwen Thsang*, i. 37.

¹⁰ The name of India is written *Hian-thu* as well as *Yin-tu*.

of Kanishka is famous in Buddhist history as a convert to Buddhism, and a great patron of Buddhist teachers. A single gold coin presents the name of **BOΔΔO**, with a figure of Buddha standing in a posture well known to us from numerous statues. There are also about a dozen copper coins, which bear both standing and sitting figures of the teacher. In his inscriptions Kanishka calls himself king of the Kushâns, or Gushâns, and in the Raja Tarangini he is said to have been a *Turushka*.¹¹

No other certain names are mentioned by the Chinese writers. But in some of the early Muhammadan authors I find the names of *Bâsdeo*, *Ujen*, and *Jasand*, as successors of *Kanak* or Kanishka.¹² But according to Binakiti *Ujen* was the predecessor of *Kanak*. By reading *Wahen*, **وحين**, instead of **وجين**, I think that this king may be identified with **OOHMO** or *Wen*. Similarly *Jasand* may be only a slight corruption of *Hasank*, or *Hushka*, while *Bâsdeo* preserves the name of *Vâsu Deva* unchanged.

During the year 94 A.D., there is a notice by the Chinese that a king of the Yue-ti was taken prisoner and put to death by the Chinese.¹³ As the Chinese record every present as "tribute," I think we may safely read "frontier chief" instead of "king," as at this very time Kanishka held hostages from the tributary Chinese Princes to the west of the Yellow River.¹⁴

During the period A.D. 220—280 the Yue-ti are said to

¹¹ *Raja Tarangini*, B. I., verse 170.

¹² Elliot's *Muham. Hist.*, ii. 406, and ii. 421. Haidar Razi.

¹³ *Les Huns Blancs*, p. 51.

¹⁴ Beal's *Hwen Thsang*, i. 173.

have held *Kipin* or Arachosia, *Ta-hia* or Bactria, *Kaofu* or Kabul, and *Thien-chu* or India. Their capital was *Lu-kien-shi*, or simply *Kien-shi* or *Lan-shi*. Ptolemy places the Tochari below the Zariaspæ. But the *Tochari*, or *Tushâras*, or *Tukhâras*, or *Tu-ho-lo*, then held Balkh, and were the same as the Zariaspæ. Ammianus Marcellinus makes the Tochari subject to the Bactrians,¹⁵ by a similar mistake. At a later date, about A.D. 425 or 430, the warlike king of the Yue-ti, named *Ki-to-lo*, conquered Kabul and *Kan-to-lo*, or Gandhâra, and five districts to the north of Gandhâra.¹⁶ While absent on this expedition the White Huns appeared on the banks of the Oxus, and he was obliged to return for the defence of his own territory; but, before leaving he installed his son in Purushapura, as King of Gandhâra, and thus established a separate dominion known to the Chinese as the kingdom of the "Little Yue-ti," or Little Kushâns.

As the White Huns managed to establish themselves to the north of the Oxus and also in Gorgo or Gurgân, the ancient Hyrkania, the power of the Kushâns was much weakened, and their dominions became limited to Balkh and Kabul. In the beginning of the sixth century the King of Kipin was at war with the King of the White Huns who held Peshawar.

Of Kujula Kadphises and Wema Kadphises the only remains are their coins, and the brief notices of the Chinese annalists. But of Kanishka and his two successors Huviska and Vâsu Deva, we possess several inscriptions, most of which are dated, the dates ranging from the

¹⁵ *Am. Marcell.*, xxiii. 6—27.

¹⁶ Julien, in *Les Huns Blancs*, p. 44.

year 7 to 98 of some era. Several years ago I made the following remarks on this subject.¹⁷

“In the Indo-Scythian inscriptions the names of four different Macedonian months have been found—namely, *Panemos*, *Daisios*, *Apellaios*, and *Artemisios*. The use of these names shows incontestably that the Macedonian calendar must have been introduced in Kabul and North-West India by the Bactrian Greeks, and as the province to the west of the Indus had belonged to Seleukus I conclude that the era of the Seleukidæ must have been adopted there also. Unfortunately the year dates hitherto discovered are all small numbers, which might refer to some recently established date of the Indo-Scythians; or, as suggested by Mr. Thomas, they may possibly refer to the Seleukidan era by leaving out the hundreds, which was the common Indian mode of reckoning the *Saptârshi Kâl*. With the Indo-Scythian inscriptions, for instance, the dates of 9, 11, 18, and 28 of Kanishka, and of 33, 39, 47, and 51 of Huvishka, might either be referred to a new era, such as the Saka Kâl of 78 A.D., or to the years 9, 11, 18, &c., of the fifth Seleukidan century, by leaving out 400. In the former case the year 7 of Kanishka would be $78 + 7 = 85$ A.D., while in the latter case it would be referred to the year 407 of the Seleukidan era, equal to A.D. 95-96.”

As these dates are found along with the names of four Macedonian months, I feel that they should naturally be referred to the Seleukidan era. Under this view the following will be the dates of the Indo-Scythian Princes Kanishka, Huvishka, and Vâsu Deva:—

¹⁷ See my *Book of Indian Eras*, p. 41.

		A. Sel.
Inscription, Kanishka	7	= 407 — 312 = 95 and 96 A.D.
„ „	28	= 428 — 312 = 116 and 117 A.D.
„ Huviska	33	= 433 — 312 = 121 and 122 A.D.
„ „	51	= 451 — 312 = 139 and 140 A.D.
„ Vâsu Deva	83	= 483 — 312 = 171 and 172 A.D.
„ „	98	= 498 — 312 = 186 and 187 A.D.

The accuracy of these dates has been confirmed by the discovery of gold coins of Wema Kadphises, Kanishka, and Huviska, in the Ahinposh Stûpa (near Jalâlâbâd) along with some Roman gold coins of Domitian, Trajan, and Sabina the wife of Hadrian. As Sabina died in A.D. 137, and as there was only one coin of Huviska amongst twenty-one specimens, the Stûpa was probably built not later than 130 A.D.

The approximate dates of the great Kushân Kings would therefore be as follows:—

B.C. 10.	Kujula Kadphises.
A.D. 35.	Wema Kadphises.
„ 75.	Kanishka.
„ 120.	Huviska.
„ 160.	Vâsu Deva, still reigning in A.D. 186.

The dates of the inscriptions would only be slightly altered to nine years earlier, by the adoption of the Saka Samvat, beginning with A.D. 79 = 1, as the era in which they are reckoned.

After Vâsu Deva we have no recorded names, but there are numerous gold coins of the seated *Ardokhro* type, which can only be referred to the Kushân princes who followed Vâsu Deva. They are similar to the early Gupta gold coins of Chandra Gupta and Samudra Gupta, but with the exception of a few of the earlier ones, they are much ruder in execution. The earlier specimens may date

from 200 to 400, and the later specimens from 400 to 600 or 700, A.D.

There are also numerous silver coins of the Sassanian period, which must belong to Vâsu Deva's successors, besides numerous copper coins, which appear to be mere copies of the gold coins. Some of them are, indeed, ancient forgeries of the gold coins, with the gilding still clinging to the deeper parts.

At last, about A.D. 450, we find the first coins of the Little Yue-ti, with the name of their leader recorded on them, as *Kidâra Kushâna Shâhi*. These Little Yue-ti reigned over Gandhâra, and probably also over Kashmir, as I would attribute all the coins that bear the name of *Kidâra* to their descendants. The name was not dropped for many generations.

During this expedition of *Kitolo*, or *Kidâra*, the *Ye-tha-ï-li-to*, or *Ephthalites*, invaded the territories on the Oxus, and Kitolo was obliged to hasten back to defend his own dominions. The Kushâns were driven to the westward, and from this time, about A.D. 470, the supreme power fell into the hands of the Ephthalites. But the mass of the population was still Kushân, and so late as A.D. 610, as I have already noted, no less than ten princes in Farghâna, Sogdiana, Naksheb, and other places to the north, claimed an unbroken descent from the *Shaowe Wen*, or King Wema Kadphises, the Kushân conqueror of India. I find a corroboration of this curious fact in the embassy of Maniach, Prince of the Sogdoites to Justin in A.D. 569. His name, ending with a guttural, proclaims him a Kushân, and the letters in the Scythian character, which he brought with him, show that he was certainly not an Ephthalite. He was, therefore, as stated by the Chinese, a Kushân prince or Shaowu, a descendant of Wen.

Ibn Khurdâdbeh speaks of a Kushân Prince of Mâwarunnahr in the ninth century; and several Kushân chiefs are mentioned in the reign of Timur. They were, of course, Muhammadans.¹⁸

The statement that Yenkaoching or Wema Kadphises conquered India is confirmed by numerous finds of his coins as far eastward as Gorakhpur, and Ghazipur, and the line of railway from Allahabad to Jabalpur. In all these places several hundreds of his coins have been dug up; and much-worn specimens are also procurable in all the bazars of the Gangetic Doâb.

The coins of Kanishka and Huvishka are even more common, while the later coins of Vâsu Deva are found in thousands. They are especially common round about Mathura, which was probably the head-quarters of one of the Kushân king's satraps. But the very latest of these coins are very barbarous; and, as the copper coins of the Guptas are exceedingly scarce, I conclude that the Indo-Scythian copper money remained current in India for several centuries.

During the first century of the Christian era Roman gold was brought to India in great quantities. The fact is preserved by Pliny, who states that "at the lowest reckoning, one hundred million of sesterces were annually taken from Rome to India, the Seres, and Arabia." The whole amount was upwards of £800,000.¹⁹ In another

¹⁸ Price, *Muhammadan History*, iii, 101.

¹⁹ *Nat. Hist.* xii. 41, 18. "Minimâque computatione millies centena millia sestertium annis omnibus India et Seres peninsula illa (Arabia) imperio nostro adimunt." The influx of gold into India still continues, but the yearly amount is now over two millions sterling. For eighteen centuries the gold of the world has been flowing into India, from whence little or none has ever left, except with a few great plunderers.

place Pliny assigns half that sum, "quingenties H.S." for India, exclusive of Arabia. In southern India the Roman gold remained current, and is still found there in large quantities. In northern India it was recoined by the Kushân Indo-Scythians, although many specimens have been preserved in Buddhist stûpas even down to our times. In 1858 I made a record of the weights of all these Indo-Scythian gold coins within my reach, and on comparing their weights with those of the Roman gold coins, I then came to the conclusion that they might have been re-struck on Roman aurei of the first century. I refer specially to the gold coins of Wema Kadphises and Kanishka, which agree in weight with the early Imperial aurei of Tiberius and Nero.

Roman gold coins are still discovered in the Buddhist monuments of the Kabul Valley, from the time of Augustus down to the fifth century. I have had gold coins of Leo, Justin, and Anastasius sent to me several times, and twice I have obtained coins of Focas. Gold coins of Theodosius, Marcian, and Leo, were found by Masson in a stûpa, near Jalâlâbâd, on the Kabul River.

The rule of the Great Yue-ti, or Kushâns, would appear to have remained undisturbed until the invasion of the Nephthalites, or White Huns, in the fifth century. But there are notices of relations, both warlike and peaceful, with some of the earlier Sassanian kings, which must certainly refer to the Kushâns. The warlike Prince Vararanes II., having conquered the Segestanîs, or Sakas of Sakastene, in A.D. 280, was still detained on his eastern frontier in A.D. 283, when the Roman Emperor Carus invaded Persia. As peace had been made with the Segestanîs, the detention would have been caused by the unsettled state of the north-east frontier of Kabul, which was then held by the

Kushâns. On the death of Vararanes the throne was disputed between the brothers Narses and Hormisdas when the latter was assisted by the *Sacci* (Sakas of Segestan), and by the Gelli, who must be the same as the Gelani of a little later date. Between A.D. 301 and 309 Hormisdas II., the son of Narses, married the daughter of the king of Kabul. That the latter was a Kushân prince we learn from a gold coin of Hormisdas, which bears the well-known type of the Kushân coins of the god *Olero*, with his bull.

During the following reign of Sapor II. the relations of the Sassanian king with the princes on his eastern frontier, would appear to have been friendly for a long time. In A.D. 350 Sapor was obliged to raise the siege of Nisibis, owing to a sudden irruption of the Massagetæ—that is, of the Sakas of Sakestene or Segestan. When this disturbance was settled we find Sapor bringing to the siege of Amida, in A.D. 359, a strong contingent of the warlike Segestani, along with the forces of the Chionitæ and the Albani, commanded by their respective kings in person. Grumbates was the king of the *Chionitæ*, and his eldest son was killed at the siege. I would identify the *Chionitæ* with the Kushâns, as I take the name to be only a Greek translation of *Tushâra* or *Tukbara*, the *Tu-ho-lo* of the Chinese, and the *Tokharoi* of the classical writers—meaning “men of the snowy land.” The Gelli or Gelani may perhaps be the same as the Albani, but I cannot even guess at their identification.

LITTLE YUE-TI, OR LESSER KUSHÂNS.

The kingdom of the Little *Yue-chi*, or *Yue-ti*, was established by *Ki-to-lo*, king of the Kushâns, or Great

Yue-chi, about A.D. 425. The Chinese syllables of the king's name may be read as *Kidâra*. Now I possess three large thin silver coins of Sassanian types, each bearing, in neat Indian characters, the legend—

Kidâra Kushâna Shâ(hi),

or "*Kidâra*, king of the Kushâns." This same name of *Kidâra* is found also upon a great number of coins in gold and copper in the north-western Punjâb, and in Kashmir. I infer, therefore, that the descendants of *Kitolo*, or *Kidâra*, must have remained in possession of some territory on both banks of the Indus for several centuries. None of these coins have been found at Kabul, and only two were discovered by Masson, in a stûpa, near Jalâlâbâd.

I have placed the establishment of the Little Yue-ti about A.D. 425, partly because the Indian inscriptions on their coins appear to me to be not earlier than the fifth century A.D., and partly because the silver coins of *Kidâra* himself seem to be of the same age as those of Vararan V., who reigned from A.D. 420 to 440. *Kitolo*'s conquest of Gandhâra must have preceded the irruption of the White Huns, who established themselves at Peshawar two full generations before the visit of Sungyun in A.D. 520—or say, about 470 A.D. The pilgrim calls the reigning king a *Ye-tha*—that is, an *Ephthalite*, or "White Hun." The full Chinese name is *Ye-tha-i-li-to*, which was contracted to *Ye-tha*, just as *Fo-tho*, for Buddha, was shortened to *Fo*.

During the occupation of Gandhâra by the White Huns, I suppose that the Little Yue-ti, the descendants of *Kitolo* or *Kidâra*, may have retired to Taxila and Mânsera. I think it probable, therefore, that they are

now represented by the *Gakkars*, who still hold portions of these districts to the east of the Indus. I base my supposition on the fact that the *Gakkars* claim descent from a hero named *Kêd*, a stranger from the Oxus, and that his descendants reigned in Kashmir for sixteen generations: These traditions accord very well with the Chinese story of the conquest of Gandhâra, by the Kushân king, *Kitolo* or *Kidara*, from the Oxus, as well as with the actual record of the name of *Kidara* on the coins of Kashmir for about four centuries.

The name of *Kitolo* is preserved by the Muhammadan historians under the form of *Kitormân*, which was the name of the *Turki* kings of Kabul, whose rule lasted down to the time of the Brahman Kallow, about A.D. 850: Alberuni says that Kanak was the last of the *Kitormân* kings, and Binâkiti says the same: Their kings also continued to use the title of *Shâhi*, which has been handed down from the time of the Great Kanishka, so that their dominion was known as the *Shâhi-râjya*. But both name and title still subsist, as the chiefs of Chitrâl, Gilgit, and Chilâs still hold the title of *Shâh-kitor*.

In fixing the date of *Kitolo* at about A.D. 425, I have been guided by the fact that he was obliged to return to his own country (Balkh) by an inroad of the White Huns (*Jwan-jwân*). Now the White Huns did not become powerful until the time of Solien Khan (A.D. 428—443). He himself was at war with Bahram Gor, the Sassanian. But his son, Chu-khân, the *Konkhas* of Priscus (A.D. 443—464) was a strong ruler, who assisted Firoz against Hormisdas, and to him I would ascribe the invasion of *Kitolo*'s dominion. It was during his stay with the camp of Attila in A.D. 446—47, that Priscus heard of the *Ῥοϋνοὶ Κιδάρται*, or Ephthalite Huns; and I would, therefore,

ascribe the return of *Kitolo* to the time of *Konkhas* or *Chu-Khân*, or 'about A.D. 450. *Kitolo* then established his son in Gandhâra, and retired to his own country.

The Chinese mention that the Little Yue-ti had coins both of gold and silver, but they say nothing as to their types. To these successors of *Kitolo* I would ascribe most, if not all, of the gold coins that bear the name of *Kidâra* under the king's arm. The Kashmir coins of *Toramâna*, and his son *Pravarasena*, bear the same name, which I take to denote some family connection with the *Kitolo* kings of the Gandhâra. We know from the *Raja Tarangini* that *Meghavâhana*, the grandfather of *Toramâna*, had received shelter at the court of *Gopâditya*, king of Gandhâra. But there are no coins bearing this name. Unfortunately, the early history of Kashmir, which ought to have assisted us, is a confused jumble of names, of which only a few can be found on the coins. These are *Hiranyakula* and *Mihirakula*, with perhaps *Gokarna*, and after them, *Narendraditya* and *Khingila*. Of the six kings of a new dynasty, not a single name agrees with the coins, and only two names of the next dynasty, *Toramâna*, and his son *Pravarasena*, are found amongst the coins. But of the succeeding dynasty of the *Naga* kings, established by *Durlabha Vardhana*, several names agree; and, as their coins still bear the name of *Kidâra* under the king's arm, I look upon these kings as the last descendants of the *Kushâns* in Kashmir, who reigned until A.D. 855.

But the main body of the Little Yue-ti, or Lesser *Kushâns*, continued to hold the Kabul Valley until they were gradually driven eastward by the *Muhammadans*. The title of *Shâh Kitor*, which is still held by the chiefs of *Chitral* and *Gilgit*, seems to me to establish this late

occupation of the Upper Kabul Valley by the Lesser Kushâns. The continued occupation by the Turki successors of Kanishka for sixty generations (? reigns) is vouched for by Alberini, who calls Mahmud's opponents, "Hindu Shâhi kings."

In A.D. 630, when Hwen Thsang visited Gandhâra, there was no king, and the country had become a dependency of Kapisa. I infer, therefore, that the Ephthalite king of Peshawar must have retired to Kabul or to Sindh, and that the Little Kushâns still held Taxila as a dependency of Kashmir. Here they would seem to have remained, while they gradually acquired possession of all the hill country between Kashmir and the Indus. I found my conclusion for this statement on the fact that most, if not all, of the gold and copper coins of this period which are found to the east of the Indus bear the royal title of Shâhi in addition to the tribal name of Kidara. The country itself is called *Shâhi-rājya*, or the "Kingdom of the Shahis," in the Raja Tarangini, while the great city of Taxila is still called *Shâh-dheri* and *Dheri-Shâhân*, or "the city of the Shâhis."

The principal occupants of this territory at the present day are the *Gakkars*, whom I take to be the actual descendants of the Little Yue-ti, or Lesser Kushâns. To establish this last position it is necessary to notice what the Gakkars say of themselves. They profess to have come from Tarân, or the country of Afrâsiyâb, under a leader named *Kid*, or *Kaid*, several centuries before the Muhammadan invasion. If they are the descendants of the Little Yue-ti, then this leader *Kid*, or *Kaid*, must be the *Kitolo* of the Chinese, and the *Kidara* of the coins. The earliest notice of them under their

present name is due to the Muhammedans. During the campaigns of Muhammad Ghorî, they were already established in their present territories. But two centuries earlier I find mention of a nameless people, who held the passes leading into Kashmir.²⁰ Their chief, named *Sâbli*, son of *Shâhi*, son of *Bamhi*, submitted to Mahmud, and offered his services as a guide. As not one of these names is Indian, the chief could not have been a Hindu; and as the name or title of *Shâhi* occurs amongst them, there can be little doubt that he and his people were Gakkars.

The Gakkars claim to have held Kashmir for sixteen generations; and if I am right in identifying them with the Little Yue-ti, or Lesser Kushâns, I think that their claim may have some foundation, as the coins of Toramâna and Pravarasena actually bear the name of Kidâra. It seems, therefore, not improbable that the princes of this family, covering seven generations, must have been very intimately connected with the Little Yue-ti. At a later date it is quite certain that the rulers of Kashmir belonged to the family of the *Shâhi* kings of Taxila, or from the time of Diddâ Râni in A.D. 1000, down to the Muhammadan conquest.

The name of Gakkar is said to have been derived from Gakkar Shâh, one of their kings, some centuries later than Kaid. Their original name is unknown.

Albiruni, in speaking of the Turki kings of Kabul, calls the founder of the family Barhatakin, or Barhtigin; whom I believe to be simply the fabulous *dun*-wolf Burtezena, the legendary progenitor of the Turki races. He mentions

²⁰ Elliot's *Muhammadan Historians*, *Uṭbi*, ii. 48.

Kanak as the "last of the Kitormân kings."²¹ This would seem to imply that the Kitor kings had possessed Kabul; and this, indeed, seems very likely, as the reigning Prince of Kipin, in A.D. 520, was then at war with the Ephthalites of Peshawar. In another place Albiruni mentions that a genealogy of this family on a roll of silk containing sixty names was found in the fort of Nagarkot (Kangra). But while the Kitor kings were reigning at Peshawar the kings of Kabul could not have possessed Kangra. Or it may be that as the Kitor princes were the descendants of *Kitolo*, the king of the Great Yue-ti, or Kushâns, they may have reckoned their genealogy from the first Kushân king of Kabul. In this way the Kitormân kings might have reached sixty generations (or ? reigns) from 10 B.C. to 1030 A.D. or 1040 years, at an average of $17\frac{2}{3}$ years per reign.

In A.D. 630; when Hwen Thsang was in Gandhâra, there was no king, the province having become a dependency of Kapisa. This may have happened by the extinction of the White Huns on the conquest of Gandhâra by the Kushân king of Kabul.

I think there is good reason for suspecting that the line of the Kitor kings did not end with Kanak. Albiruni mentions the names of eight kings as his successors, as follows :—

A.D.

825, *Kanak, the last Kitorman.*

1. 850, Kalar, a Brahman.

2. 860, Sâmanda, ,,

²¹ Reinaud, *Fragments, Arabes et Persans*, p. 149. Gibbon, *Decline and Fall*, c. 42. Elliot's *Muhammedan Historians*, ii. 18.

	A.D.		
3.	900,	Kamalūa,	a Brahman,
4.	940,	Bhima,	„
5.	950,	Jayapāla	(? a Kitor prince restored).
6.	1002,	Anandapāla	„ „
7.	1021,	Trilochanpāla	„ „
8.	1026,	Bhimapāla II.	„ „

Of the first four of these kings we have silver coins; but there is not a single coin of any one of the last four. Kamalūa was a contemporary of Amru bin Lais, 878 to 900 A.D. Jayapāla fought with Subuktagin, and Anandapāla fought with Mahmud of Ghazni. As before stated, there are no coins of the last four princes, all of whom bear the name of Pāla, and the first is said to have been the son of Hīspāl. These four kings, therefore, would seem to have no family connection with the first four. I suspect that they belong to the old Kitormân dynasty, as Anandapāl is called Shâh by Albiruni,²² and Trilochan-pāl is called Shâhi in the Raja Tarangini. As they were not Muhammadans there was no reason for giving them this title; but as Trilochanpāl is called *Shâhi* and not *Shah*, I think it is almost certain that these last four princes must have belonged to the old Kitormân family.

I may note here that *Trilochan-pāl* is the prince whom all the Persian and Arabic writers persist in calling *Nardajan* and *Fardajan-pāl*.²³ As there are no coins of these last four princes I conclude that the very extensive mintage of Samanta Deva was found sufficient for the wants of the country.

²² Sachau Albiruni, ii. 13.

²³ I made this correction as early as 1842 in my account of the Ancient Coinage of Kashmir.

EPHthalITES, OR WHITE HUNS.

The *Ephthalites*, or White Huns, make their first appearance in history early in the fifth century. To the industry of D'Herbelot and De Guignes we owe the collection of the various notices of Chinese authors; but our chief debt is due to Vivien de St. Martin, who, in his *Les Huns Blancs*, has added all the scattered accounts to be found in Armenian and classical writers. By the Chinese they were usually called *Jwan-jwan*, or *Jen-jen*, which is said to have a derogatory meaning in their language. Their true name of *Ephthalites* was very closely rendered by the syllables *Ye-tha-i-li-to*; but as the Chinese frequently abbreviated proper names, as *Fo* for *Fo-tho*, or Buddha, so the name of the Ephthalites was lost sight of in the contracted forms of *Ye-tha* and *Yi-ta*, which are applied to other peoples.

The earliest western notice of the White Huns is by Moses of Khorene, who mentions the *Hephthag* as one of the barbarous peoples of Scythia in the first half of the fifth century. The next notice is by the historian Priscus, who was the ambassador of Theodosius II. with Attila, in the years A.D. 445 to 447. He calls them Οὔννοι Κιδαρίται, which appears to me to be only another name for Ephthalites, as *Hidalitæ* or *Hidarite*. In A.D. 530 they are described by Kosmas Indicopleustes as Λευκοὶ Οὔννοι, or "White Huns," and only a few years later, in A.D. 540, Procopius calls them by the same name as Ἐφθαλίτων ἔθνος, with the addition of λευκούς, or white. In the following century Theophanes calls the White Huns Νεφθαλίτας. Several other various spellings of the name are given by Vivien de St. Martin, as *Idalagdn* by Lazarus of Parba,

Abdelâ by Theophylact, *Theddâl* by the Armenians, and *Haiathelah* by Firdausi and in the *Mojmal ut tawârikh*, as well as by the Sassanians.

According to Procopius the White Huns held the country to the north of the Persian dominions, with *Gorgo* as their capital, which St. Martin has identified with *Gurgân*, the chief city of ancient Hyrkania. According to Kosmas they occupied the country along the western bank of the Indus, to which he gave the name of *Oÿvvia*, or *Unnia*, and not *Hunnia*.

From their occupation of the countries on the Oxus and the Indus, the White Huns soon came into conflict with the Persians on the west and the Indians on the east, and our knowledge of their history is chiefly due to their wars with their neighbours.

According to the Chinese, the first noted leader of the Jen-jen was *Shekun*, who reigned from A.D. 385 to 410. He dropped the native title of *tsanyu* for that of *Khakân*, which was adopted by all his successors. He was followed by three princes, of whom the last, named Tâtân, must be the *Khâkân* who fell in battle with Bahram Gor, or Vararan V., at Darband, on the Oxus, in A.D. 428. Tâtân was succeeded by his son *Solien Khan*, A.D. 428—443, who received a Chinese princess in marriage. Next came *Chu-khan*, 443—464, who was driven across the Oxus by Isdegard II. But afterwards, with his aid the Sassanian Firoz (Perozes), in 459, defeated his brother Hormisdas, and became King of Persia. Priscus calls this Ephthalite king *Κούνυχας*, which I take to be the same as the Chinese *Chu-khan*. His successor was *Shu-lo-pu-chin*, the *Khush-Nawâz* of Sassanian history. Feroz gave his sister in marriage to the Khâkân, but his feeling of dependence so rankled in his mind that he shortly afterwards invaded

the Khâkân's dominions, and was killed in battle. An ambassador from the Byzantine Emperor Zeno accompanied Feroz in this unfortunate invasion, which Gibbon, on the authority of Procopius, assigns to the year A.D. 488. But the eastern writers refer the death of Khush-nawâz to 484—485. Three other princes followed, but the power of the White Huns was then declining, and no further relations with the Persian kings are recorded. The last prince, *Onowei*, was defeated in battle by *Tu-men*, the king of the Turks, who put him to death in A.D. 546. "Thus," says Gibbon, "ended the empire of the Nephthalites, or White Huns, a polite and warlike people, who had vanquished the Persian monarch, and carried their victorious arms along the banks, and perhaps to the mouth of the Indus." (*Decline and Fall*, c. 42).

The name of *Hûna* was well known to the Indians as a people on the north-west frontier. The Hûnas are not mentioned in the posthumous inscription of Samudra Gupta on the Allahabad Pillar. But as this record cannot be placed later than A.D. 380, the silence of Indian evidence is in full accord with both the Chinese and the Persian accounts, which place their first appearance in the next century. Our earliest notice of the White Huns on the Indus is due to the Chinese pilgrim, Sung-yun, who in A.D. 520 visited Gandhâra. He says that it was originally called *Ye-po-lo* (Embolina?), and adds, "this is the country that the *Yethas* (White Huns) destroyed, and afterwards set up *Laelih* to be king, since which events two generations have passed." The king was not a Buddhist, and he had been three years at war with Kipin.

If we place the reigning king's accession in A.D. 510, then the accession of Laelih may be placed two generations or about fifty years earlier, or in A.D. 460—470.

The king kept 700 war elephants. This agrees with the account which Kosmas, A.D. 530, gives of King Gollas, who kept 1,000 elephants.

There is a strong temptation to identify this King Gollas with the great *Mihir-gul*, whose title of *Shâhi* proclaims him to have been a Scythian. Mr. Fleet's Mândasor Inscription of A.D. 532 mentions Mihirakula as a powerful prince, who had paid homage to the reigning king of Malwa Yasodharma. It also notes that this king possessed countries which neither the Guptas nor the *Hûnas* could subdue. From my Gwalior inscription we learn that Mihirakula's father was Toramâna, and very lately an important inscription of this Toramâna has been found in the Salt Range of the western Panjâb. As neither *Mihir-gul* nor *Toramâna* is a Hindu name, it would seem that both princes must have been Scythians. But there is nothing to show that they were Hûnas, except the fact that at this period the northern Panjâb was under the rule of the Hûnas. If we might identify Mihir-gul with Gollas, then Toramâna would be the father of the king who was reigning at Sung-yun's visit, and Laelih would be the father of Toramâna. The Western coins give the name of *Mihir-gul* with the title of *Shâhi*. The Eastern coins give *Mihir-kul* without the title.

As the date of the settlement of the White Huns in Gandhâra, and along the west bank of the Indus, corresponds with the period during which the province of Sindh, on the Lower Indus, was held by a Scythian dynasty who bore the title of *Shâhi*, it seems probable that the Ephthalites, as suggested by Gibbon, may have extended their conquests to the mouths of the Indus. The period of Scythian rule in Sindh lasted for 137 years, from A.D. 505 to 642. The original settlement corresponds

not only with the date of Gollas on the Indus, but also with the well-ascertained period of the wide rule of Toramâna and his son Mihir Kul. The father succeeded Budha Gupta in Malwa shortly after 174 of the Gupta era, $318+175=493$ A.D., while the son had already done homage to Yasodharma before A.D. 532. The great extension of the power of the White Huns may therefore be assigned to the most flourishing period of Ephthalite dominion under *Khush-Nawâz*, conqueror of Feroz of Persia, and under his son *Fukushun*, who together reigned from A.D. 464 to 508. Their rule probably lasted in the Panjâb until the close of the sixth century, as the *Hâra Hûnas* are mentioned by Varâha Mihir as a people of the North-west as late as A.D. 550. The "Western *Hûnas*" are also mentioned in the Apsar inscription as the antagonists of Dâmodara Gupta, about A.D. 560—580. But they had disappeared as a ruling race before A.D. 530, when Hwen Thsang visited Gandhâra, as that country was then subject to the rule of Kapisa, while Taxila belonged to Kashmir.

Regarding the extension of the Ephthalite rule to Segestan I feel very sceptical. The early Muhammadan writers, who must have received all their information from the Persians, naturally described all Scythian races by the one name of Ratbil or Rantil, Zambil or Zantil, Ratil or Abtil, &c., corrupted in a dozen different spellings. Amongst these various readings I recognise the name of the Ephthalite antagonists of the Persians. Theophylact, in the seventh century, calls them *Abdela*, and as this is the nearest form to the original Ephthalite, I conclude that the various names given to the rulers of Sejistan, Kabul, and Sindh, are simple corruptions of the one name.

The following notices of these conquerors are taken

from Elliot's *Muhammadian Historians of India*, vol. i., pp. 417—420:—

IN A.H. 22, or A.D. 643, Sejistan was taken, and shortly afterwards Mekrân and Sindh were conquered by the Muhammadans, when the king, named *Ranbil*, was killed.

IN A.H. 78, or A.D. 697—98, Abdul Aziz, Governor of Sistân, invaded Kâbul, when the king, named *Zambil*, was killed.

IN A.D. 775—809, the Khalifs Al Mahdi and Ar Rashid took tribute from *Ranbil*, king of Sistân.

IN A.D. 813—833, the Khalif Al Mamûn took Kâbul, when the king submitted and professed Islâm.

IN A.D. 869—70, Yâkub bin Lais took Kâbul from *Ranbil*, who appears to have been killed.

IN A.D. 878—900, *Kamlu* was reigning at Kâbul, and was contemporary with Amru bin Lais.

But only a few years previously, in A.H. 260—61, or A.D. 873—75, coins were struck at Panjshir, in Kâbul, by Yâkub bin Lais.

With respect to the kings of Kâbul, there can be no doubt that they were not Ephthalites, as Biruni specially mentions that the rulers previous to Kamlu and his two predecessors were Turks of the family of Kanishka, which had ruled for sixty generations up to the time of Mahmûd of Ghazni.

As the White Huns were a barbarous nomad race, who were ignorant of writing, it seems probable that they may have had no coins. The pilgrim Sung-yun, who visited Gandhâra in A.D. 520, had seen the *Yetha* in their own country on the Oxus. He found them simple nomads, who practised polyandry and had no written characters. But when they were settled in Gandhâra amongst a civilised Indian population, it seems very probable that they would have struck coins in their own names, as the previous rulers had done. As they had no written characters of their own, they would of course have adopted the

Indian characters; and I am, therefore, very strongly inclined to assign the coins of *Mihir-gul* to the Ephthalite Huns of the Indus. I adopt this opinion the more readily as we learn from Sung-yun that the reigning king of Gandhâra in A.D. 520 was not a Buddhist; which agrees with the strongly pronounced Brahmanism of the coins of Mihir-gul, which display the *trisul*, or trident, as well as the standard of Siva with the humped bull, and the inscription, *jayatu Vrishi dhvaja*, "May he whose symbol is the bull (Siva) be victorious." I am inclined, therefore, to assign all the coins of this class with Brahmanical symbols, such as the conch shell of Vishnu, and the trident and humped bull of Siva, to the White Huns of the Indus.

The silence of Hwen Thsang, who twice passed through the old country of the White Huns, between A.D. 629 and 642, is a striking proof of the complete decay of their power in his time. I believe, however, that the pilgrim has actually mentioned them without recognising their name. I refer to *Hi-mo-ta-lo* on the Oxus, of which Hwen Thsang gives a translation as "under the snowy mountains." But as this meaning would give a purely Indian origin to the name as *Hima-tala*, it may be dismissed at once. I believe that the Chinese syllables simply represent the name of the Ephthalites under a slightly different form as *Hematala*, which approaches the Haia-thela of Firdausi. That his *Himatala* is the *Yetha* of Sung-yun is proved by a curious custom which is mentioned by both pilgrims—that the married women wore a horn three feet long on their head-dress. As this peculiar custom is not noticed regarding any other people, I conclude with some confidence that both *Yetha* and *Himatala* are only two variant forms of the same name.

II.—NOTES ON THE COINS.

On examining the coins of the Indo-Scythians, I observe that there are several marked differences in the money of the two great races, the Sakas and the Kushâns. The Saka coins show a decided preference for the worship of the Scythian Herakles, and offer no traces of the Persian and Indian worship of the planets and elements. The Kushâns, after the reign of their first king Kujula Kadphises, adopted the Sabeanism of Bactriana with a strong mixture of the worship of Indian gods, as shown by the use of several names of purely Indian origin.

Another striking difference between the coins of the two races is the total absence of monograms on the Kushân money, while the Saka coins are remarkable for the number of their monograms, both in Greek and in Arian characters. The coins of the Greek Hermæus are never without monograms, while those of his successor, the Kushân king Kujula Kadphises, are distinguished by their total absence.

A third difference between the two coinages is the entire want of gold money amongst the Sakas, and the same want of silver money amongst the Kushâns.

These three differences are so marked that I think they might be used as fair tests of the race of any of the kings whose nationality might otherwise be doubtful. Thus Miaüs, or Heraüs, who uses no monograms, should be a Kushân, and not a Saka, king.

The abundant use of gold by the Kushâns may, I think, be explained by the great increase of commerce which took place between Rome and India with the establishment of the Roman Empire under Augustus. During

this period, as recorded by Pliny, about £400,000, or nearly half a million sterling, was the *yearly* sum paid by Rome to India.²⁴ What became of this gold? In Southern India it circulated unchanged with the square silver indigenous coins, but in Northern India, where the people were already familiar with the Greek coins of the Bactrian kings, the Roman gold was recoinced by the Kushân princes, beginning with Hima Kadphises, who certainly reigned in the middle of the first century A.D. I came to this conclusion about thirty years ago by comparing the weights of more than a hundred Indo-Scythian gold coins with those of the early Roman Emperors.

With regard to the absence of silver coins amongst the Kushâns, I can only guess that the extensive coinages of silver money by the Greek kings were found sufficient for the wants of the people. But it still remains a mystery why the silver money was not recoinced, as was done with the Roman gold. Perhaps as the hemidrachms of Antimachus, Antialcidas, Menander, and Apollodotus were familiar to the people, it was thought best not to disturb them, but to adjust the new gold coinage to the existing value of silver. Well-preserved specimens of these silver hemidrachms average 37 grains in weight, and the silver didrachms average 148 grains. If the new gold coin was equal in value to 10 didrachms and 40 hemidrachms its value in silver would have been 1,480 grains. This amount, at 12 rates of silver for 1 gold, would make the weight of the new gold coin 123·3 grains, which is, as nearly as possible, the actual weight of the Kushân gold

²⁴ *Plinii Nat. Hist.*, xii. 41. "Minimâque computatione," he says.

coins. I have taken the weights of 179 examples, which give the following results :—

19	Dinars of Hima Kadphises	average	122·21	grains.
21	„ Kanishka	„	122·19	„
118	„ Huvishka	„	122·16	„
21	„ Vasu Deva	„	123·3	„

The later coins of Vasu Deva, which are less worn than the others, give the full weight of 123·3 grains.

The small quarter Dinârs of these four kings also average 30·8 grains, which would give a full Dinâr of 123·2 grains.

Now if these coins had been simply copied from the Roman Denarii Aurei, they would most probably have fluctuated in weight with the Roman coinage of the first and second centuries. But, on the contrary, their full weight is maintained to the last, from the earliest coins of Wema Kadphises down to the close of Vasu Deva's reign in the end of the second century A.D.

With regard to the long-continued currency of the Greek silver coins, we have the testimony of the author of the *Periplus*, who says that up to his time (80 to 100 A.D.²⁵) "old drachmas bearing the Greek inscriptions of Apollodotus and Menander were still current at Barygaza." As the author was a contemporary of Kanishka, his testimony is decisive as to the continued currency of the Greek coins during the reign of the Kushân kings.

The absence of gold coins amongst the Sakas may perhaps be due to the continued circulation of the old

²⁵ He mentions *Malikhos*, king of the Nabathæans. As their kingdom was subverted by Trajan, in A.D. 105, the author of the *Periplus* cannot be placed later.

Persian Darics in Sakastene and Arakhosia. Some specimens are even now found there.

The coins offer very few examples of the Indo-Scythian speech, except in the names of the kings, as all the titles of the Saka kings are given in Greek with Indian translations. We know, however, that the language of the Sakas, or Massagetæ, was similar to that of the Parthians; and this similarity is well shown in the names of Vonones, Arsakes, Gondophares, Abdagases, and Pakores. We know also that they had a distinct dialect, as the Avesta is said to have been translated into seven different languages, amongst which were the dialects of Sejistan and Merv,²⁶ that is, of the Sakas of Sakastene, and the Kushâns of Merv. The only inscription of this race is a short record of Gondophares in the Indian language.

Of the Kushân dialect we have the king's names, and the royal titles of *Shaown* or *Zâvu* ("King"), and *Raonano Rao* ("King of kings"). All the Kushân inscriptions yet found are in the Indian language. A peculiarity of the Kushân language was the fondness for the ending of proper names in *ka*. Thus we have Kanishka, Huvishka, and Kujulaka, of the coins and inscriptions, besides Jushka of the Kashmir history. At a later period we have Maniach, Prince of the Sogdoites, and during the reign of Khusru Parvez two powerful Kushân kings are mentioned under the names of Shog and Pariog.²⁷

With regard to the partiality of the Scythian kings for the type of Herakles, I will now offer a few remarks which I think will be sufficient to show that the Turanian

²⁶ Hyde, *Religio Vet. Pers.*, p. 337.

²⁷ Prof. Rawlinson, *Seventh Ancient Monarchy*, p. 495.

races identified the Greek demigod Herakles with their own "God of the dead," named Gebeleizes and Zamolxis. Herodotus notes that the Getæ worshipped Herakles, but he does not mention his Scythian name.²⁸ There can be no doubt, however, that Gebeleizes, the Scythian "God of the Dead," was the same as *Sapaleizes*, whose name means "Lord of the Dead," and whose figure was copied from that of the Greek Herakles.

The earliest form of the name is the Babylonian *Iskalla*, who is also known as *Ne-uru-gal*, or "Lord of the great City" or "Kingdom of the Dead." In the curious legend of the "Descent of Ishtar into Hades," *Iskalla* is described as the god of the house where all meet, but from which none can depart; while the Queen of Hades is named *Nin-ki-gal*. She is therefore the same as the goddess *Nana*, whose image was carried off from *Erech* by Kuder-nahundi, King of Elam, in B.C. 2280.

The king's name of *Ne-uru-gal* is clearly the same as *Nergal*, who was the god of *Kutha*. In the Septuagint the god's name is written Ἐργεῖλ, which points directly to Ὀρκος and *Orcus*, and also to *Erkle* and *Herakles*. *Nergal* must likewise be connected with the Sanskrit *Naraka*, "the abode of departed spirits," and therefore also with *Erech*, or *Warka*, "the burial city of the Babylonians." Another connection of the name with the dead is the Greek νέκρος, "a corpse," as well as the flower Νάρκισσος, or the "numbing," which was being plucked by Persephone at the very moment that she was seized by Hades, and carried off to become the Queen of the lower world.

In the Indian Vedas the ruler of the dead is called

²⁸ Herodot., iv. 94 and 59.

Yama, but he was also named *Vakra*, or the "cruel," which would seem to be the same name as that of the god **OKPO** on the Indo-Scythian coins. As King of *Naraka*, or Hades, **OKPO** is represented as holding a noose and a mace or club. On the coins he is further identified with **HPAKIAO** or Herakles, with the club and lion's skin. On several coins **OKPO** is joined with the goddess **NANA**, which shows that these two deities were esteemed as king and queen, being the representatives of the Babylonian *Iskalla* or *Nergal*, and his queen *Nin-kigal* or *Nana*. That **OKPO** was the god of the dead is shown by the noose and the mace or club, both of which are lethal instruments of the Indian god *Yama*. As bearer of the former he is known as *Pâsa-pâni*, or "noose in hand," and as wielder of the latter he is called *danda-dhara*, or "mace-holder." A well-known title of *Yama* is *Chitra*, and I would suggest that the Persian name of *Sitra-takhmes* must have referred to Death's irresistible strength, its meaning being simply "strong as *Chitra*."

The name of *Sapal* continued in use amongst the Turanian peoples down to a very late date. Thus *Dizaboulos*, the great Khâkân of the Turks, who sent an embassy to Justinian, is called *Shapolio* by the Chinese. The Greek form of the name is due to the want of a Greek letter corresponding to *sh*, for which *Diz* was substituted. In the same way *sani*, or *shani*, the name of the planet Saturn, became *Dhizân*, from which form must have originated the *Δορσάνης* of Hesychius.

But the name of *Iskalla* at once suggests that of the Scythian eponymus *Skolopites*, and his people the *Skoloti*. To connect this name with *Sapalaizes*, I would refer to the Sanskrit *sava*, a corpse, and *savara*, a name of Siva, as well as to t¹ - Latin *sepelio* and *sepulcrum*. I would refer also

to *Sagillus*, King of the Scythians, and to *Sigal*, the capital of the Sakastanian Sakas. The same name is found under several slight variations of spelling, of which the most notable is *Kola-xais* (or *Skola-xais*), the progenitor of the *Paralatae* (or *Sparalatae*), or Royal Scythians. On the coins of the Indo-Scythian Sakas we have the name of *Sapaleizes* on one side, coupled with the name of the goddess *Nanaia* on the reverse. *Sapal-eizes* means simply the god *Sapal*, or *Herakles*, whose name and worship were widely spread amongst all the Scythian races. The Indo-Scythian kings *Spalahora* and *Spalirises*, in addition to their names, offer the seated figure of *Herakles* on their coins. On Mount *Sambulos* (or *Sabul*, dropping the epenthetic *m*) the Parthian king *Goterzes* offered worship to *Hercules*.²⁹ The name of the mountain is slightly altered by Pliny to *Kambalidus*.³⁰

The last reading of *Kambalidus* points to *Gebeleizes* as only a variant form of *Sapaleizes*, to which I would add that *Zamol-xis* is another variant. I think also that the *xis* of *Zamol-xis* and the *xais* of *Skola-xais*, may be simply the equivalents of *geises*, *gases*, or *geses*, and *eizes* or *ises*, which form the termination of so many Scythian names. *Xis* and *xais* might be connected with the title of *Shâhi*, which was used by the Indo-Scythians both on coins and inscriptions. *Gases* and *eises* are found in *Abdagases*, *Bolagases*, *Monneses*, &c., and may possibly have some connection with the Sanscrit *isa*, or "lord," as in *Vagises*.

In further connection with the dead we have the form of *Σαυλῶν*, which was the name of the place which held the tombs of the Parthian kings. And this form leads

²⁹ *Taciti Annal.*, xii. 13.

³⁰ *Plinii Nat. Hist.*, vi. 31.

to *Shaul* or *Sheol*, the Hebrew name of Hades. *Bet-saloë* also was the name of a place at *Kutha*, in Persia, which was noted for the worship of *Nergal*, or Hercules.

This widely-spread use of names connected with *Sapal*, or Heracles, seems to point to an early period in the world's history, when the worship of the God of the Dead had extended from the eastern shores of the Caspian to the banks of the Danube. And this extent of the Scythian territories was in fact claimed by the envoys of the Massagetæ when they met Alexander on the banks of the Jaxartes, "*ultra Tanaim usque ad Thraciam colimus.*"³¹

In the following account I have divided the coins of the Indo-Scythians into several different classes, which correspond with the several different periods of their history.

Class A.—*Rude Imitations of Greek Coins*, from first occupation in B.C. 163, down to establishment of Kushâns in 116 B.C.

Class B.—*Coins of the Sakas or Saca-Scythians* in Arakhosia and India, from B.C. 116 to 16.

Class C.—*Coins of the Great Yue-chi, or Kushâns*, in Kabul and N.W. India, from B.C. 16 to A.D. 200.

Class D.—*Coins of the Later Kushâns* in Kabul and N.W. India, after A.D. 200.

Class E.—*Coins of the Little Yue-chi, or Lesser Kushâns*, in Peshâwar and N.W. Panjâb, after A.D. 480.

Class F.—*Coins of the Ephthalites, or White Huns*, on the Indus, in A.D. 480 to 600.

CLASS A.—RUDE IMITATIONS OF GREEK COINS.

Class A includes imitations of the small silver coins of Alexander the Great, and of the larger silver pieces of

³¹ Curtius, *Vit. Alex.*, vii. 8, 30.

Seleukus I. and Antiochus I. of Syria, and of the Bactrian kings Euthydemus, Demetrius, Eukratides, and Heliokles. These Bactrian imitations are by far the most numerous, and more especially those of Euthydemus in silver, and of Heliokles in copper. On some of the imitations of Antiochus and Euthydemus there are native characters in addition to the corrupt Greek names of the imitated coins. These native legends have not yet been read. They may be only transliterations of the Greek names, but Mr. Thomas's attempts to read them as such were not successful. The characters appear to me to be similar to those on the coins of the Arsakian kings of Parthia.

On the imitation of the tetradrachms of Eukratides I find the detached Greek letters **NA**. I have a cast of a true tetradrachm with the same letters, and there is a true coin of the same type in the British Museum. If these letters are intended for a date, they would represent 51, or, with the centurial figure added, they would represent 151 of the Seleukidan era, equivalent to B.C. 161, which corresponds with the early part of the reign of Eukratides.

The small silver oboli are simple copies of the coins of Eukratides, including even the monogram.

One of the coins having the name of Heliokles, with the figure of Zeus, is also a simple copy both of the obverse and reverse. But the other coin with the horse on the reverse is perhaps original, although the horse may have been copied from the square copper coins of Hermæus.

All these rude imitations of the Greek coins I attribute to the early Indo-Scythians who conquered the countries on the Oxus. Only a few stray specimens are found in the Kabul valley, and none in the Panjâb. The types are nearly all taken from the coins of the Greek kings who

ruled in Bactria, the few exceptions being copied from the money of Mithridates I. of Parthia. The Scythian archer, on the imitation coins of Antiochus, is probably original.

It is not easy to fix a date for the issue of these coins, but I am inclined to think that none of them can be earlier than B.C. 163, when the *Yue-chi*, being driven to the south of the Jaxartes by the Hiong-nu, pushed the Sakas to the south and west. The Bactrian Greeks then retired to the south of the Oxus, and, after some time, continued their retreat to the south of the Indian Caucasus, and left the whole of Bactriana in the hands of the Scythians. These coins I believe to have been issued chiefly by the Sakas; but until we can read the names recorded on some of them in native characters it seems useless to hazard any speculations about their issue. This rude coinage probably continued down to about B.C. 16, when the Kushân conqueror Kujula Kadphises imposed his name on the reverse of the copper coins of Hermæus.

The coins of *Hurkodes* are the only Scythian pieces that offer purely native types not borrowed from the Greeks. If I am right in identifying the hero figured on the reverse as the representative of the mythical leader of the Turki races, *Burtechino* or *Bertezina*, then *Hurkodes* must have belonged to the great horde of the Yue-ti; but to which of the five divisions there is nothing to show. The latter part of the name recalls the Thracian *Kotys*—of which *Miltokuthes* seems to be a compound form. But it is more probable that the Scythian name of *Hurkodes* may be a compound of *Hurk*, "the wolf," which is found in *Hyrkania*, and that *Hurkodes* is only a variant rendering of *Burtechino*, or *Bertezina*, or *Barhatigin*, the hero of the Turkish race. The armed figure on the reverse would then be the God of War, who was specially worshipped by

the Scythians. The legend of *Ardethrou* would then be equivalent to *Raorethro* of the coins of Huvishka—that is, the god *Ares*, or *Athro*. According to Abu Rihan's account, *Barhatigin* preceded *Kanak* or *Kanishka*. There are two distinct kinds of his coins—one with the war god on the reverse and the other with the fore part of a horse bridled. On the former the inscriptions are always in Greek letters; on the latter they are sometimes Greek on the obverse and Parthian on the reverse, or Parthian on both sides. The Greek inscription on the obverse is always **YPKWΔΟΥ**, and the corresponding Parthian inscription I read as *Karatakin*, or *Garatagin*. The Parthian inscription on the reverse I have not succeeding in reading. Mr. Thomas read it as *Kuāt*.

The Greek legend of **ΜΑΚΑΡΟΥ ΑΡΔΗΘΡΟΥ**, which accompanies the divine figure on the reverse of the large coins, I take to mean simply "Ardethra of Makar," taking *Makar* to be the same as *Bakar* of the following legend, preserved by Biruni.³² "Kabul was formerly governed by princes of the Turkish race, and the first of them, named Barhtigin, dwelt when he arrived at Kabul in a cave (named *Bakar*). After remaining in the cave for some time without food, "Barhtigin came all of a sudden out of the cave . . . clothed as a Turk, with a tunic, cap, boots, and armed from head to foot." A similar story was told of Bertezena, the first leader of the Turks. But Bertezena, or Burtechino, is clearly the same name as Barhtigin, and I have no doubt that the divine figure on these coins is intended for the legendary leader of the

³² Elliot's *Muh. Hist.*, ii. 9. On the later coins **ΜΑΚΑΡΟΥ** is changed to **ΟΑΚΑΡΟ**, which is an equally correct rendering of *Bakar*.

Turks, armed from head to foot, just as he was said to have issued from the cave.

The date of the coins of Hurkodes cannot be placed earlier than the first century, owing to the late shape of the *omega*, ω . Raoul Rochette suggested that they might "have been struck by some of the barbarous tribes upon the borders of the Caspian, from whence they seem to have been brought."

Smardates and Rangodeme.—This curious coin presents two heads; that of a king on the obverse, and of a queen on the reverse. I have two other specimens of the same types, but in very bad order. I read the two names as **TANAI CMAPΔATHC** and **KYPIA PAΓ-ΓΟΔΗΜΗ**, or King Smardates, and Queen Rangodeme. I take the king's name to be Smardates preceded by the title of *Tanli*, which I refer to the Scythian *Tham*, or "king." *Tanli* or *Tanais* may be compared with Justin's Scythian King *Tanaus*. The queen's name I take to be Rangodeme, and the term *Kuria* to be the title of "queen." We know from Herodotus that the Scythian Apollo was called **ΟΙΤΟΣΥΡΟΣ**, but from an inscription we learn that the full form was **ΟΙΤΟΣΚΥΡΟΣ**, while the moon was called **ΣΕΛΟΙΤΟΣΚΥΡΑ**. The terms *skuros* and *skura* would thus seem to mean simply "god and goddess," or king and queen. By dropping the initial Σ in both we get *kuros* and *kura*.

There is nothing except the rude workmanship and the round form of the sigma, **C**, to declare the age of these coins. My three specimens were obtained at different times, and they are the only specimens that I have seen during fifty years of collecting. My impression is that they belong to the country on the Oxus, and that their style is due to Parthian rather than to Indo-Grecian influence.

III.—DESCRIPTIVE LIST OF THE COINS.

RUDE IMITATIONS OF GREEK COINS.

Pl.	No.	Inches.	Æ	Grains.	IMITATIONS OF ALEXANDER.
	—	0·6		40	<p>Rude copy of silver drachma.</p> <p>Barbarous head covered with lion's skin to r.</p> <p><i>Rev.</i>—Figure seated on chair, with bird on outstretched r. hand, copy of Zeus Aetophorus. These pieces are small and thin, and are very common.</p>
I.	1	1·05	Æ	244	<p>IMITATION OF SELEUKUS I.</p> <p>Rude copy of silver tetradrachm.</p> <p>Barbarous head to l., covered with lion's skin.</p> <p><i>Rev.</i>—Zeus Aetophorus seated in chair. Corrupt Greek legend, ΣΛΑΤΚ [for ΣΕΛΕΥΚΟΥ]. Under the seat the letters ΔΙ, and beneath them Π.</p>
I.	2	0·6	Æ	46	<p>IMITATIONS OF ANTIOCHUS I.</p> <p>Rude copy of silver drachma.</p> <p>Helmeted head with cheek-piece, to r.</p>
I.	3	0·7	Æ	51	<p><i>Rev.</i>—Victory placing wreath on trophy. ANTIOXO.</p> <p>Rude copy of silver drachma.</p> <p>Diademed head of king to l., with moustaches. Native legend of five letters behind head.</p>

I.	4	0·5	Æ	28	<p><i>Rev.</i>—Scythian archer standing. Greek legend, ΒΑΣΙΛΗΝΕΙ—CANTΙ·Χ·Υ.</p> <p>N.B. There are rude copies of this coin without Greek letters. The shape of the Greek <i>sigma</i> betrays a late date.</p> <p>Rude copy of silver drachma.</p> <p>Diademed head of king to l., with moustaches. Native legend behind the head, as in No. 3.</p> <p><i>Rev.</i>—Horse's head to l., with the Greek letter K.</p> <p>N.B. These coins are very rare, but there are numbers of very rude copies in two different sizes.</p>
I.	5	1·05	Æ	175	<p>IMITATIONS OF EUTHYDEMUS.</p> <p>Rude copy of silver tetradrachm.</p> <p>Rude diademed head of king to r.</p> <p><i>Rev.</i>—Herakles seated on rock to l., club resting on knee. Legend of seven native letters behind, and corrupt Greek legend to l. ΕΥΘΥΔΗΜ.</p> <p>N.B. There are several gradations in the state of corruption of these coins. The earliest bear Greek legends only, as Ariana Ant: I. 5., the letters being only slightly altered. In the second stage the Greek letters are corrupt and imperfect. A third class have mixed legends of rude Greek and native letters. The fourth and latest are extremely rude, and bear native characters only: Ariana Antiqua, I. 9. I have given the inscribed reverse and form of these</p>

III.—DESCRIPTIVE LIST OF THE COINS—*continued*.

Pl.	No.	Inches.	Grains.	
I.	6	1.05	137	<p> \mathcal{A} </p> <p> rude pieces, No. 6 of the Plate. Both Mr. Thomas and myself have attempted to read the legend, but without much success. The letters appear to be Parthian. </p>
				<p> IMITATIONS OF EUKRATIDES. </p>
I.	7	1.1	212	<p> \mathcal{A} </p> <p> Rude copy of silver tetradrachm. Helmeted head of king to r. <i>Rev.</i>—The Dioskuri mounted, to r. Corrupt Greek legend, ΙΑΣΙΛΕΠΣ ΜΕΓΛΟΥ ΕΥΚΙΑΤΑΥ. In the field to r. the detached letters ΝΑ. N.B. There is a genuine tetradrachm with these two letters in the British Museum, and I possess a cast of a similar coin. </p>
I.	8	0.4	9	<p> \mathcal{A} </p> <p> Rude copy of silver obolus. Helmeted head of king to r. <i>Rev.</i>—Caps and palms of the Dioskuri. Greek legend, ΒΑΣΙΛΕΠΕ ΕΥΚΡΑΤΑΔΟΥ (sic). Greek monogram in field forming ΑΝΤΙ. </p>
I.	9	0.45	9	<p> \mathcal{A} </p> <p> Rude copy of silver obolus. Helmeted head of king to r. <i>Rev.</i>—Caps and palms of the Dioskuri. Greek legend, ΛΙΑΚΟ ΚΟΖΟΥΛΟ. Greek mon. in field. </p>

N.B. *Liaka Kusulaka*, as we learn from a copperplate inscription found at Shah-dheri (Taxila), was a satrap in the W. Punjab. The record is dated in the year 78 of the era of the great king *Moga*. If this king is the same as Moas of the coins, the inscription must belong to the latter half of the 1st century B.C. The satrap Kusulaka is also mentioned in the great Satrap inscription from Mathura, with the title of *Maha Chhatrapa*.

IMITATIONS OF HELIOKLES.

Rude copy of silver tetradrachm.

Large head, diademed to r.

Rev.—Zeus standing to front, with spear and thunderbolt.

Corrupt Greek legend on three sides, ΒΑΣΙΛΕΥΣ ΔΙ-ΔΙΔΙΥ ΗΛΙΕΥΣ. for ΒΑΣΙΛΕΥΣ ΔΙ-ΚΑΙΟΥ ΗΛΙΟΚΛΕΟΥΣ.

N.B. There are small coins of the same types and legends, weighing 57 grains.

Rude copy of silver tetradrachm.

Large rude head, diademed to r., as in No. 10.

Rev.—Horse stepping to l., as on coins of Mithridates I. of Parthia. Corrupt Greek legend, as on No. 10.

N.B. There are also small coins of this type. On some specimens the *omikrons* are not omitted, but are represented by simple small dots.

I.

10

1·15

Æ

233

I.

11

1·1

Æ

228

III.—DESCRIPTIVE LIST OF THE COINS—continued.

Pl.	No.	Inches.	Grains.	NATIVE TYPES.
I.	12	0·6	25	Horse stepping to the r., as on the last. <i>Rev.</i> —Feathered arrow, surrounded by a wreath.
I.	13	0·5	17	Rude head to l., with native legend. <i>Rev.</i> —Pallas armed to front, with native legend.
I.	14	0·55	39	[<i>Brit. Mus. Cat.</i> , xxiv. 16.] Very rude head of king to r. <i>Rev.</i> —Rude figure of Herakles with club. Greek legend in late letters, ΦΕΙΓΑ ΧΑΡΙΕ.
				HURKODES. [<i>Brit. Mus. Cat.</i> , xxiv. 8.]
	15	0·65	44	Silver coin, drachma size (slightly broken). Bearded head of king to r. ΥΡΚΩΔΟΥ. <i>Rev.</i> —Armed figure to front, flames rising from shoulders, spear in r. hand. ΜΑΚΑΡΟΥ ΑΡΔΗΘΕΡΟΥ.
	16	0·5	12	N.B.—On later specimens, ΟΑΚΑΡΟ ΟΡΔΗΘΕΡΟΥ. King's head to r. with long pointed beard. Native legend of six letters behind head.

I.	17	0·7	Æ	54	<p><i>Rev.</i>—Half horse, bridled to r. Native legend of five letters above.</p> <p>N.B. These horse coins are of three kinds:—</p> <ol style="list-style-type: none"> 1. With Greek name of Hurkodes on both sides. 2. With Greek name on obv. and native legend on rev. 3. With native legend on both sides. <p style="text-align: center;">SMAEDATES OR MARDATES.</p> <p>King with crested helmet to r.</p> <p>ΤΑΝΑΙ ΣΜΑΡΔΑΤΗC.</p> <p><i>Rev.</i>—Head of queen to r., covered with veil, holding flower in r. hand.</p> <p>ΡΑΓΓΟΔΗΜΗ ΚΥΡΙΑ.</p> <p>N.B. I take <i>kuria</i> to be the royal title of queen, and <i>Rangodeme</i> to be her name. <i>Eme</i> is, in fact, the feminine suffix of the Mongols.</p>
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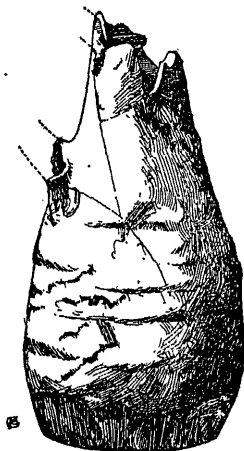
V.

ON A HOARD OF SILVER COINS FOUND AT NEVILLE'S CROSS, DURHAM.

IN the spring of this year a young man named Markey, while engaged in bird's-nesting in a wood on the left bank of the River Browney, near Neville's Cross, observed at the root of a tree a small earthenware pot sticking out of the ground. In removing it the vessel was broken into several pieces, and its contents proved to be a number of silver coins of different denominations, and struck under several different kings, both English and Scottish. The fact that the earthen pot had contained coins of any value was not at first recognised by the finder, who, however, on taking some of the coins to a silversmith at Durham became aware of the nature of his discovery, and disposed of the remainder of the hoard to Mr. Matthew Fowler and Mr. George Neasham, of Durham, both of whom are interested in local antiquities. Through the kindness of my friend, Mr. John W. Barnes, F.S.A., of Durham, nearly all that has been preserved of the hoard, including the fragments of the vase, has been placed in my hands for examination.

Only a part of the vessel had been preserved in the first instance, and subsequent search set on foot by Mr.

Fowler failed to procure the whole of the other fragments. Still, enough remains to have enabled Mr. Ready, of the British Museum, to restore the vessel sufficiently to show its form and character, and I am indebted to Mr. Charles H. Read, F.S.A., for the sketch from which the subjoined woodcut has been executed.



6½ HIGH

JUG FROM NEVILLE'S CROSS.

It is a jug which, however, has lost its handle and upper part. It is narrower at the neck than below, and was originally about $7\frac{1}{4}$ inches high, and is $3\frac{3}{4}$ inches in diameter. It is turned on a wheel, and formed of thick well-burnt red ware, the surface covered with a yellowish green glaze. It is of interest as showing the character of the domestic pottery in ordinary use during the latter half of the fourteenth century.

The coins submitted to me for examination consisted of the following :—

Edward I.—

Bristol penny	1
Canterbury pennies	2
Durham penny	1
London pennies	4
	— 8

Edward II.—

Canterbury pennies	5
Durham pennies	2
London pennies	7
St. Edmundsbury penny	1
	— 15

Edward III.—

London groats	10
London half-groats	8
York half-groats	2
	— 20
London penny transitional	1
London pennies	4
Durham „ CIVITAS DVRÆMÆ crosier r. . .	6
„ „ CIVITAS DVRÆMÆ dot. after CIVITAS	1
„ „ „ DVROLMÆ crosier r. . .	4
„ „ „ DVROLM crosier l. . .	21
„ „ „ DVRÆLM crosier l. . .	1
„ „ „ DVRÆMÆ crosier l. . .	4
„ „ „ Uncertain	31
York „	69
	— 142

SCOTTISH COINS.

Alexander III.—

Penny	1
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David II.—

Edinburgh groats	24
Edinburgh half-groats	4

Robert II.—

Edinburgh groats	30
Perth groats	8
	— 38
Edinburgh half-groats	3

FOREIGN STERLING.

John, King of Bohemia	1
	—
	256

The pennies of Edward I. are for the most part considerably worn, the average weight being $17\frac{1}{4}$ grains: The Durham penny reads CIVITAS DVRÆMÆ.

Those of Edward II. present no special features of interest. The two Durham pennies are much worn but appear to read DVNÆLMÆ. The average weight of the fifteen is about $17\frac{3}{4}$ grains.

The groats of Edward III. are all from the London mint and somewhat worn. The heaviest weighs $71\frac{1}{2}$ grains and the lightest only 60 grains, the average being about $64\frac{1}{4}$ grains. The mint mark is a cross. On one of them there is a small cross to the left of the mint mark on the reverse. Mr. Neasham, in an account furnished to the local newspapers, has mentioned one specimen with the crown mint mark on the reverse. This I have not seen. Seven of the London half-groats are of the common type, with the obverse legend ending in FRÆNC or FRÆNCI. One however, reads +ÆDWARDVS : REX : ANGL : DNS : hYB, and gives ÆDIVTORÆ x MÆV' on the reverse. The average weight is $34\frac{3}{4}$ grains. Both the York half-groats read FRÆNCI and have annulets after POSVI and DÆV on the reverse. They each weigh about 36 grains.


Of the London pennies one is of the peculiar type with Lombardic N's and an annulet in the obverse legend, like *Num. Chron.*, N.S., vol. xi., Pl. IX., No. 11. Its weight is 18 grains. The other four are of the usual type reading +ÆDWARDVS REX ANGLI with Roman N's on the reverse. They weigh about 17 grains each.

The Durham pennies present some peculiar features. Twenty-two of them, the average weight of which is about $17\frac{1}{4}$ grains, seem to read CIVITAS DVNOLM on the reverse and to have a crosier end attached to the top of

the cross that divides the field of the coin. The form is that shown in the annexed figure



One penny reads CIVITAS DVNELM, with the ends of the cross turned round to the left so as to form a crosier,

thus, . Four others have a similar crosier, but read

DVRÆMÆ. Seven others with the same reading have a similar crosier turned to the right, some of them having either a trefoil or an annulet on the breast of the king. One of these has a pellet after CIVITAS. Their obverse legend is + EDWARDVS REX ANGLI, or ANGLIÆ, and they are somewhat better struck than the bulk of the other Durham pennies. Four other pennies with the crosier to the right read, DVROLMIÆ or DVNÆLMIÆ. One of these has CIVI instead of CIVI.

Thirty-one of these Durham coins are so badly struck that it is impossible to determine their characteristics. They weigh, however, on the average, $17\frac{1}{2}$ grains. The crosier turned to the left (though occasionally also to the right) is commonly regarded as the mark of Bishop Kellow, and so far as these coins of the types attributed to Edward II. are concerned, this view is probably correct. Kellow, however, died in 1316, and as Edward III. did not come to the throne until 1327, the coins of that king with this mark must have been struck under some other bishop. The mark of Bishop Beaumont, who occupied the see from 1316 to 1333, is a lion rampant, the principal charge in his family arms, sometimes accompanied by fleurs-de-lis, with which the field of his arms was semée. He was succeeded at the end of 1333 by Richard Aungervyle or De Bury, to whose episcopate no coins

have hitherto been attributed, although it appears that writs for the delivery of dies for coining sterlings at Durham were issued during his time, though towards the end of his episcopate.¹ The coins of Edward III. with the crosier to the right have been attributed, by most numismatic writers, to the episcopate of Thomas Hatfield, who succeeded Bury in 1345, though, as will subsequently be seen, this attribution may be incorrect.

Of such coins only eleven are present in the hoard. They have the crosier to the right, and for the most part give the name of the city as DVREΛMÆ. Four of these, however, read DVROLMÆ, or possibly DVRELMIÆ. Their average weight is $17\frac{1}{2}$ grains, which is rather above that of the pennies with the crosier turned to the left.

When we consider the estimation in which De Bury was held by the king,² who, together with the queen, the queen-mother, and the King of Scotland, were present at his installation, and further, that after holding various offices about the Court, he was made Treasurer of England in the same year that he received his bishopric, and lastly, that he became Chancellor of England, it seems incredible that the rights of coinage exercised by his immediate predecessor and successor should have been intermitted while he occupied the see of Durham.

After Beaumont's adoption of the lion rampant during a period of sixteen years, and after an alteration in the weight and obverse legend of the pennies, there would appear to have been no danger of confusion arising from the adoption by Bishop de Bury of the same distinctive mark as that of Bishop Kellow. I am inclined, therefore, to attribute the coins of Edward III. with the

¹ See *Ruding*, vol. ii., p. 166, and Noble, *Coins of Durham*, p. 26.

² See Noble, *Coins of Durham*, p. 25.

cross on the reverse ending in a pastoral staff or crosier turned to the right to the mint of Bishop de Bury instead of to that of Hatfield.

The coins, moreover, with the crosier to the left are not only more numerous in the hoard than those with the crosier to the right, but also somewhat lighter in weight. They would therefore seem to be later in date. As Bishop Hatfield lived well into the reign of Richard II., in the early part of whose reign this hoard, as will subsequently be seen, was probably deposited, this change in the attribution of the coins fits in well with the circumstances of the case.

The York pennies, sixty-nine in number, are of the common character, very badly struck, and of the average weight of little more than $16\frac{3}{4}$ grains. They all have the usual quatrefoil in the centre of the reverse.

More than a quarter of the coins that I have examined are of Scottish origin. The earliest of these is a penny of Alexander III. of the common type—Lindsay, Pl. III. 68; Cochran Patrick, Pl. I. 14; Burns, Pl. XV. 166. Its weight has been reduced by wear to 17 grains.

Of David II., A.D. 1329—1371, there are 24 Edinburgh groats of the usual character—Lindsay, Pl. IV. 94; Cochran Patrick, Pl. II. 8; Burns, Pl. XXII. 291. The most have trefoils in the angles formed by the tressure on the obverse, but some are without. None have mullets. One of them weighs as much as 69 grains, and one as little as 46 grains, but the average weight is about 62 grains.

The four Edinburgh half-groats of David II. present no special features of interest. They are more carelessly struck than the groats.

The coins of Robert II., A.D. 1371—1390, are numerous in the deposit, no less than 30 Edinburgh groats being pre-

sent—at least 23 read SCOTTORVM, but two certainly give SCOTORVM. The word on the others is not clear. They are of the usual type—Lindsay, Pl. V. 104; Cochran Patrick, Pl. II. 13; Burns, Pl. XXIII. 309. Their average weight is only about 60 grains, the heaviest being about 63 grains.

Seven of the Perth groats read SCOTTORVM, but one gives SCOTTSRVN. Their average weight is 59½ grains. One reads VILLÆ AD PÆRTH, as Lindsay's No. 240.

The half-groats of Robert are all three from the Edinburgh mint, and are badly struck.

There remains but one coin to notice, a counterfeit sterling of John the Blind, Count of Luxemburg, 1309—1346, who also assumed the title of King of Bohemia. It reads IOHANNES DEI GRATIA REX B on the obverse, and MONETA MÆRAVD on the reverse. The type is engraved in Chautard's *Imitation des Monnaies au type Esterlin*, Pl. XV. No. 2. The town of Méraude is on the Meuse, and some notices of other coins struck there will be found in the *Num. Chron.* N.S. vol. ii., p. 32 and 147. The coin itself is one of those "lussheburghs," the currency of which was more than once prohibited under Edward III.,³ and the nature of which is alluded to by Chaucer in the Monk's Prologue—

"For God wote no lussheburghis payin ye,"

and again by the author of *Piers Plowman's Vision*—

"The marke of the Money is good, and the metel feble."

With regard to the exact date when this hoard was deposited it is difficult to speak with confidence. From

³ See *Ruding*, vol. i., p. 222.

the number of coins of Robert II. that are present in it, it is evident that the coins must have been brought together some little time after his accession to the Scottish throne in 1371. The absence of coins of Richard II. would, on the other hand, appear suggestive of the deposit having been made not later than 1377. It is, however, somewhat doubtful whether our kings in those days began striking money at all their mints immediately on their accession. Indeed, there is not wanting evidence to prove that for some considerable time after the change upon the throne the old dies of the deceased monarch continued in use, notwithstanding even a change in the name of the reigning monarch, until it was found convenient to issue new dies for use in the various mints. Moreover, on Richard's accession he was a minor only eleven years old, and it is well known that at the beginning of his reign there were troubles about the supply of bullion to his mints. Even in 1381 a petition seems to have been presented by the officers of the Mint of the Tower of London representing that no money, either of gold or silver, was made in the said Tower, to the great damage of the King and of all his people.⁴ It would seem that at Durham it was not until the seventh year of Richard II. that the old dies that had been given to Bishop Hatfield were recalled, and new dies delivered to his successor, John Fordham.⁵

So far as the mint at York is concerned, it appears that in the first year of Richard II. a writ was issued for the delivery of dies, but whether any result ensued from the issue of the writ is uncertain. None of Richard's York groats are known, and the pennies that were struck at

⁴ *Ruding*, vol. i., p. 239.

⁵ *Op. cit.*, vol. ii., p. 166.

that mint, from dies apparently engraved in London, have a similar obverse to the Durham pennies, for which the dies were not apparently delivered until 1384.

The deposit of this hoard may, however, be safely regarded as being prior to that date; and we shall not, I think, be far wrong in believing that this Neville's Cross hoard found the resting-place in which it was discovered some time in the early part of the reign of Richard II., or within a few years of A.D. 1380.

It has been suggested that the deposition of these coins may have been connected with the great battle of Neville's Cross, which took place very near the spot where they were discovered. Inasmuch, however, as the battle was fought in 1346, while Robert II., whose coins form part of the hoard, did not come to the Scottish throne until a quarter of a century later, it would be a waste of time to discuss such a view.

I need only add that, thanks to the liberality of Mr. Matthew Fowler and the judicious suggestions of Mr. Barnes, such coins as were wanted to fill gaps in the national collection have been deposited in the British Museum.

JOHN EVANS.

NOTICE OF RECENT NUMISMATIC PUBLICATION.

Catalogo das medalhas brasileiras e das estrangeiras referentes ao Brazil. 1889, pp. 52. (Only 25 copies printed.)

A carefully compiled Catalogue by the Viscountess De Cavalcanti of her own collection of medals relating to Brazil. There are no illustrations, but references to other works where the medals have been published are given throughout, and the descriptions are accompanied by notes. The earliest medal described is dated 1596, but most of the specimens belong to the present century.

W. W.

MISCELLANEA.

DRAUGHTSMAN FROM METAL DIE.—I have a wooden draughtsman struck from a metal die, made probably for a medal, although no example of any such medal is known. The artist is Martin Brunner, whose initials in monogram occur on both sides. The *obv.* has a representation of a palm-tree surmounted by three crowns, the central one being closed and that on each side open. Across the tree on a label is the word CONCORDES; to the trunk is tied a harp of an abnormally large size, and, from an artistic point of view, out of all proportion to the surroundings. At the foot of the tree are cannon, shields, standards, helmets, and other accessories of a trophy, with landscape beyond. The legend, in two concentric lines, is REX GVILIELMVS IVSTVS, SIC FLOREBIT, RECVPERATOR ET TRIVMPHATOR MAXIMVS. On the *reverse* is a representation of Fortune, with flaming hair, holding an unfurled standard in one hand and a flaming heart on a winged globe in the other. Around her body is a rope which is being pulled at the right hand by James II., with sword at his side and a musical instrument and book at his feet, and at the left hand by Father Petre, at whose left is a cabinet on which is a ciborium, and at the foot of which are two bags of gold, the front one labelled 1,000. The legend is AH FORTVNA BONA! ME CONDONA. This draughtsman refers probably to the pacification of Ireland in 1690, of which there are other medallic illustrations.

H. MONTAGU.

NUMISMATICS IN BILLS OF INDICTMENT.—The Middlesex County Records, of which three volumes have been published by a society recently founded for the purpose, contain some entries of numismatic interest, as throwing light on the currency of the sixteenth and seventeenth centuries, and on the names by which the various coins current were commonly known. As the entries are from the Middlesex Sessions Rolls, and principally consist of records of Bills of Indictment and Recognisances, we may safely assume that the statements contained in them have, as it were, legal sanction. Taking the Rolls of the reigns of Edward, Mary, and Elizabeth, we find record of the following gold pieces:—angels and old angels at ten shillings, half-angels at five shillings, quarter-angels at two shillings and sixpence, crowns and English crowns at five shillings, and half-crowns of gold at two shillings and sixpence. In addition to these we find “an olde ryall” worth fifteen shillings; “unam peciam auri cuniati vocat, one Elizabethe Royall ad valenciam, Xs.,” “an Edward half-crowne,” worth two shillings and sixpence; a “Supur ryall,” probably a spur-ryal, “ad valenciam Xs.,” a piece of coined gold called “a piece of XXXs.,” and various foreign coins—French crowns, Crusados, ducats or double ducats, and pistoles or pistolettes. These coins and their respective values are what might have been expected, but when we come to the term sovereign we meet with a most unexpected version of its value. The first mention of such a coin is in the 3rd year of Elizabeth, when one Richard Tylman and another were hung for having burglariously stolen, with other things, “decem pecias auri voc’ soueraignes ad valenciam quinque librarum.” In the 13th Elizabeth we find an entry of “tres pecias auri cuniat Anglice voc’ soueraignes ad valenciam XXXs.” In the 15th Elizabeth there is an entry of “a sufferen ad valenciam Xs.” In the 20th to 25th years the same value appears. In the 27th year are mentioned forty-eight pieces of coined gold called “rialles and soueraignes” worth twenty-four pounds. In the 39th year, and in the 47th, the sovereign is still described as worth ten shillings only. No mention is made of a double sovereign, but in the 6th Edward VI. we find a *di. sovereign* worth ten shillings, and in the 16th Elizabeth “an halfe-soueraigne” valued at ten shillings; and in her 27th year “duas pecias auri cuniati vocat’ half soueraignes ad valenciam XXs.” It would therefore appear that though the ten-shilling pieces were sometimes described as half-sovereigns, yet that pieces of the same value could be described in an indictment as sovereigns. Possibly the term referred to the type rather than the value, and any coin showing the sovereign, and seated in state, was known as a sovereign. The pennies of

Edward the Confessor and of Henry VII. and his successors, with the king seated on his throne, are commonly spoken of as being of the sovereign type, but I am not sure as to the time when this term originated. As to silver coins, Rose testours were in the 3rd of Elizabeth valued at fourpence each; in 3rd and 4th Philip and Mary their sixpences were called "half-shillings." Very often a certain sum is said to have been stolen in "numbered money." In the reign of James I. a gold coin is mentioned of his kingdom of Scotland "*anglice* vocat, the sixe pounce piece of goulde *alias* the crosse dagger now current in this kingdom of England." Scottish Riders are described as not current in England. In his first year mention is made of an Elizabeth double-sovereign worth twenty shillings. This entry confirms the evidence of ten-shilling pieces having been commonly called sovereigns, as does another entry in his 5th year. In the 9th year of James thirty pieces of coined gold, called "twentye shilling pieces," were stolen, worth thirty pounds, and with them were two thirtye shillinge pieces and twenty-five angells. These latter are valued at thirteen pounds and ten shillings, which seems an odd sum. In the 13th year of King James, and afterwards, his "unites" were worth twenty-two shillings apiece; and in his 8th year, two gold fifteen-shilling pieces are stated to have been stolen. Under Charles I. a rose noble (printed role nobls) is valued at seventeen shillings and sixpence; and, under the Commonwealth, a thirty-shilling piece of Queen Elizabeth, gold, is valued at thirty shillings. At the same time was stolen "one piece of gold called a Vespasian," which, however, was valued at only twenty shillings. Mr. Thomas Moore, whose house was broken into, lost numerous other coins, as well as "one meddall of Kinge Charles and Queen Maryes worth three pounds and ten shillings." Five of the burglars were, however, found guilty and sentenced to be hanged. The counterfeiting of the silver coins, from half-crowns down to twopenny pieces, seems to have gone on during the whole time embraced in these Records, but to have been more prevalent during the latter part. These extracts merely touch one feature among many of great interest in these Records, whether regarded from an historical or social point of view, but will, I trust, be specially acceptable to the members of this Society.

JOHN EVANS.

VI.

ON A RECENT DISCOVERY OF ROMAN COINS IN SOUTHERN INDIA.

FINDS of Roman *Aurei* have been made, from time to time, in various parts of South India, a detailed account of which will be found in my *Catalogue of Roman, Indo-Portuguese, and Ceylon Coins in the Madras Museum*.¹

I recently received a letter from the collector of the Kistna district of the Madras Presidency, informing me that treasure, consisting of fifteen gold coins of the Roman Empire, had been found by a native, while he was digging in the old fort of Vinukonda, and that as he concealed them instead of making them over to the nearest authority, they became forfeit. The whole of this valuable treasure is now deposited in the Madras Museum, and consists of *Aurei* of Tiberius, Vespasian, Domitian, Hadrian, Antoninus Pius, Faustina sen., Marcus Aurelius, Commodus, and Caracalla. One point of interest is that the majority are of types which have not been recorded in the previous finds in South India. Though many of the coins are bent, and some are perforated, as if they had been worn as ornaments, all are in a good state of preservation, and the legend on the obverse of No. 6 alone is illegible.

Vinukonda is said to be the spot where Ráma heard

¹ Published at the Government Press, Madras, 1888.

the news of the rape of his wife Sita; and the locality abounds with Hindu remains of great antiquity.²

The following is a description of the coins—

TIBERIUS.

1. *Obv.*—TI . CAESAR . DIVI . AVG . F . AVGVSTVS.
Laureate head of the Emperor r.
Rev.—PONTIF . MAXIM. Vesta seated r., a spear in r.
hand, branch in l.
2. The same as No. 1.

VESPASIAN.

8. *Obv.*—VESPASIANVS . AVG Laureate head of the
Emperor r.
Rev.—A bull r., with head lowered and tail erect. In
exergue [I]MP. XIII.

DOMITIAN.

4. *Obv.*—DOMITIANVS . AVGVSTVS. Laureate head of
the Emperor r.
Rev.—GERMANICVS Minerva r., with a shield on l.,
arm raised to throw a spear.

HADRIAN.

5. *Obv.*—HAD AVGVSTVS. Head of the Em-
peror r.
Rev.— . . S. III . P . P . The Emperor on horseback r.,
holding spear brought to the charge in r. hand.
6. *Obv.*— Laureate head of the Emperor r.
Rev.—ADVENTV[I] . AVG . AFRICAE. Two figures
sacrificing at an altar.

² *Vide Manual of the Kistna District, 1883.*

ANTONINUS PIUS.

7. *Obv.*—ANTONINVS . AVG . PIVS . P . P . TR . P . XXII.
Laureate head of the Emperor r.

Rev.—VOTA . SOL . DECENN. II. The Emperor veiled,
standing l. over an altar, on which he is pouring a
libation. In the exergue COS . III.

8. *Obv.*—ANTONINVS . AVG . PIVS . P . P . TR . P . XIII.
Head of the Emperor r.

Rev.—LAETITIA . COS . IIII. Two female figures stand-
ing, one holding corn, the other a globe.

9. *Obv.*—ANTONINVS . AVG . PIVS . P . P . TR . P .
XVI. Laureate head of the Emperor r.

Rev.—COS IIII. Emperor standing l., holding in r. hand
globe, and sceptre in l.

FAUSTINA SENIOR.

10. *Obv.*—DIVA . AV FAVSTINA. Head of the Em-
press r., with hair braided.

Rev.— TAS . AVG. Female figure standing l. before
an altar.

11. *Obv.*—DIVA . AVGVSTA . FAVSTINA. Head of the
Empress r.

Rev.—AETERNITAS. Female figure standing, facing l.,
a globe in r. hand, and sceptre in l.

MARCUS AURELIUS.

12. *Obv.*—AVRELIVS . CAESAR . AVG . PII . FIL. Head
of the Emperor l.

Rev.—TR . POT . VI . COS . II. Minerva standing l.,
with Victory in her extended r. hand.

13. *Obv.*—IMP . GAES EL . ANTONINVS . AVG. Head
of the Emperor r.

Rev.— . . . CORDIAE . AVGVSTOR . TR . P . XVI. The
Emperor and Lucius Verus facing each other, with
r. hands joined. In the exergue COS . III.

COMMODUS.

14. *Obv.*—L . AEL . AVREL . COMM . AVG . P . FEL.
Laureate head of the Emperor r.

Rev.—LIB . AVG . P.M. TR.[P.] XVII . COS . VII . P . P.
Female figure (Liberty) standing l. with staff in l.
hand, and cap of liberty in r. hand.

CARACALLA.

15. *Obv.*—ANTONINVS . PIVS . AVG . BRIT. Laureate
head of the Emperor r.

Rev.—SECVRITATI . PERPETVAE. Female figure seated
on a throne, her r. arm supported on the back of
the throne, and head resting on r. hand ; sceptre
in the l. hand.

EDGAR THURSTON.

VII.

THE ROMAN STATION OF VAGNIACÆ.

THE cabinet of Roman Coins in my collection which has been fortunate enough to invite description by the pen of our talented neighbour, Mr. C. Roach Smith, F.S.A., in Volume VII. of the 3rd Series of the *Numismatic Chronicle*, is mainly interesting in connection with the question of the true locality of Vagniacæ, the 32nd Station on the 2nd Iter of the Itinerary of Antoninus from the great Wall to Richborough, and at nine miles from Durobrivæ (Rochester). Mr. Roach Smith has given some particulars as to the remains that have been discovered on the presumed site of this station, but I may venture to add some further details.

It was formerly contended that Maidstone was the site of the station in question ; but any acquaintance with the general plan of Roman ways renders this claim doubtful, though Roman remains from its neighbourhood have been recently discovered both valuable and interesting, and they are accessible at the excellent general museum recently opened in that town.

Southfleet (and that part of the parish particularly known as Springhead), where the undermentioned coins have been found over a period of several years, is the southernmost end of an arm of the river Thames, which at

its mouth gives the name of Northfleet to the parish in which it debouches into the river. It is still tidal for a fourth of its total length inland of some two miles.

Many years ago this fleet was crossed, near its mouth, by the mill dam of the corn-mill, the ancient possession of the See of Canterbury, so that the receding tide increased the fall of the upland water and the power of the wheel. The fleet itself bears evident marks (apart from the testimony of Kilburn and Philpot) of having shrunk in width and volume of water, but the head of the spring still feeds the large watercress beds at Springhead; and it is in and around this part that the foundations of Roman buildings have been continually discovered, numerous Roman interments have been opened, a mile-stone found, and on one occasion a heap of disused and worn-out iron horse-shoes (containing as many as five hundred) was laid bare.

In my collections from these parts there are several bronze hand bells, a bronze statuette, bronze stirrup, fibulæ, pins and personal ornaments, a fish-hook (quite of the modern pattern), keys, including some of the well-known signet-ring pattern, and other articles; and in iron, spear-heads, rowels of spurs, horse's bit, horse-shoes, knives, and other objects.

The physical configuration of the locality is in favour of it being Vagniacæ. It is moreover situate on the Roman road which runs from Rochester (Durobrivæ) with extreme directness, and possesses unquestioned traditional repute as a Roman road. The spot is well watered by the springs, and is near to and below the British Oppidum in Swanscomb Forest, connected with one of our most picturesque historical Kentish legends.

What probably invests the point with additional interest

is the doubt which hangs over the exact site of *Noviomagus*, the previous station ordinarily placed at Keston, and by others, including Dunkin, near Dartford.

On the other hand, we have a sure datum at Durobrivæ, the next following station, and, as the critical acumen and knowledge of Mr. Roach Smith is decidedly in favour of Southfleet being Vagniacæ, I trust that the character of these coins, which he has investigated, may help in the confirmation of that opinion.

There was also here found a separate parcel of Roman coins (chiefly billon or base metal), which Mr. Smith examined in 1887 (120 in number), and which he supposed (not improbably) to have been the private hoard of a soldier called away to the discharge of his duty elsewhere in Britain or across the Channel, and who never returned to reclaim his little treasure, but left it for the speculation of the numismatic and antiquarian savants of the nineteenth century.

They are described by Mr. Roach Smith in an interesting communication which he made upon the subject in the *Archæologia Cantiana*, Vol. XVII., p. 209. The hoard comprised 82 coins of Postumus, of Victorinus 22, Gallienus 7, Salonina 2, and Tetricus 2; with single specimens of Gordian III., Philip, Trajanus Decius, Valerian, and Marius.

GEORGE M. ARNOLD.

VIII.

ON A FIND OF ROMAN COINS NEAR CAMBRIDGE.

IN the early part of the present year, as some labourers were digging a post-hole near Cambridge, they discovered two Roman jars of light-red ware, with rather narrow necks, containing about 2,500 coins. One of the pots was in fragments, but the other was uninjured. It was found impossible to extract the contents, so it was broken. The coins were almost directly purchased by a numismatic friend of mine; not, however, before some two hundred had been disposed of. There are in the remaining lot, coins of fourteen emperors and one empress,¹ from Gordian III., A.D. 238, to Aurelian, A.D. 270. They consist of billon, plated, and third brass. The most numerous are of Tetricus and his son, of whom there are no less than 858 specimens of third brass and 22 varieties of type. Some of these are of rude execution, the lettering also is much blundered. On the other hand a great many are well struck coins. The head of Tetricus, jun., shows the round and pleasing features of a boy. Of Victorinus there are 634 third brass, but only ten types. A number of these are plated with tin or silver, and the majority are in good state. The billon of Postumus are also in fine state. There are 410 coins and 42 varieties,

¹ See page 334.

nothing, however, particularly scarce or worthy of remark. Of Claudius Gothicus there are 115 coins of third brass, and 34 types, some few washed with silver. Of his brother Quintillus there are only 11 specimens, in fair condition but very common types. The coins of Gallienus are 110 in number, 40 varieties. They consist of billon, copper, and a few plated coins; some have the reverse of the animals which were sacred to the various Roman divinities. No legionary coins are amongst them.

Of his father Valerian there are 29 specimens, 12 types. This Emperor seems to have been sixty-four years of age when he assumed the purple; some of the heads bearing his name have a youthful appearance, which has not I think been satisfactorily explained by Akerman and other writers.

There are also 10 plated coins of Salonina, all different reverses. Marius, 8 plated coins, 5 types; and of Lælianus 5, of the only known reverse of Victory marching with a garland and palm-branch. These are also plated specimens. There are three coins of Aurelian in third brass, common ones, and one of Gordian III. much worn, reverse *Fortuna Redux*. There are about 70 remaining coins, which (although many of them are unworn) are extremely rude. They probably belong to the elder and younger Tetricus. Akerman, in his *Coins of the Romans relating to Britain*, says that possibly these may have been struck in this country.

I have noticed amongst coins that I have purchased at Sandy rude imitations in second brass of coins of Claudius, much resembling them, and on which the legends are quite unintelligible. Of the same class also are the barbarous imitations of coins of Carausius and Allectus.

I may here mention that all the coins of Victorinus are

of superior workmanship, and that those of Postumus in billon are in excellent state and covered with a fine patina. This hoard may have been concealed about the year A.D. 270, as only three specimens of Aurelian are amongst them, and this seems about the period that Tetricus and his son gave up their portion of the Empire. A hoard of very similar character was found some years ago at Luton, in Bedfordshire.

	A.D.	Types.	
Unknown and } Wasters	—	66	—
Gordian III.	238	1	1
Philip	243	1	1
Treb. Gallus	251	1	1
Valerian	254	29	17
Postumus	258	411	42
Gallienus	260	110	40
Salonina	260	10	10
Victorinus	265	634	10
Lælianus	265	6	1
Marius	267	8	5
Tetricus, sen. }	267	858	22
Tetricus, jun. }			
Claudius Gothicus	268	155	34
Quintillus	270	11	5
Aurelianus	270	3	3
<hr/>			
2,304			

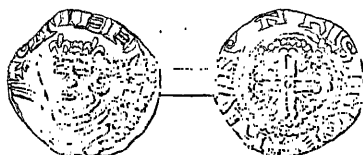
Since writing the above four additional coins have come to hand from this find.

- 1 Philip, sen. *Rev.* ANNONA AVGG.
- 1 Treb. Gallus. *Rev.* APOL. SALVTARI.
- 1 Postumus. *Rev.* SÆCVLO FRVGIFERO, caduceus winged.
- 1 Lælianus. Victory marching, &c.

FRANK LATCHMORE.

IX.

THE MINT OF CASTLE RISING, IN NORFOLK.



THE fortunes of many of our English towns have greatly varied during the course of their existence, and several which in Saxon and early post-Conquest times were considered of such importance as to deserve a mint and one or more moneyers, have now become mere villages. On the other hand, others which were formerly of but little note have now acquired a position which makes it a matter of astonishment to the uninitiated that they did not participate in the right of coinage in the days of yore. To some extent the solution of the problem lies in the fact that in those times the strategical position of a town more often influenced its growth and importance than any other cause; whereas now, when fortunately there are no intestine wars, and, let us hope, no fear of foreign invasion, the commercial aspects of the case have outweighed those of a more political nature. Among the victims of decadence may be mentioned the small village (formerly a market town and borough) of Rising, in the County of

Norfolk, generally called Castle Rising on account of the fortifications, of which the remains still exist.

Castle Rising was perhaps a fortified place in the time of the Ancient Britons, more probably so during the period of the Roman occupation, and certainly so in the later Anglo-Saxon times. This is not surprising, having regard to the favourable nature of its site, which formerly was still further protected and assisted by the sea, upon an armlet of which it stood. For many years it was a considerable seaport, inferior only to Lynn and Yarmouth in its county. Subsequently, the sand so accumulated that the port was entirely choked up, and the nature of the place was altered with its transition from a marine to an inland borough. Owing to the proximity of the County of Norfolk to the land of the Vikings it was constantly subject to their attacks, and along its coast it has been suggested by the late Mr. Samuel Woodward (*Archæol.* xxiii. 360) that we trace a line of forts calculated to meet such descents, and that these forts were situate on high ground near the beach, and within such distance of each other as to be enabled, on the appearance of an enemy, to give notice by signal to the whole line, and probably to the stations in the interior. Mr. Woodward suggests further that Rising Castle was probably the site of the first of these forts on the western side of the county, and refers to the Roman *Castrum* as being a long square, parallel with the coast, exceeding in length the usual form of such works, and intersected subsequently by the fosse and vallum of the Norman castrametation. The earthworks, still apparent, have by other authors been considered to be clearly of Roman origin.

Geographically the village is situate in the Lynn division of the Freebridge Hundred, and is 43 miles (W.N.W.)

from Norwich, and 102 (N. by E.) from London. Towards the end of the reign of King Edward the Confessor it belonged to the great lordship of Snetesham, held by Stigand, Archbishop of Canterbury. When that primate was brought into opposition to William the Conqueror he was deprived of all his lay fees and inheritance, of which this, being one, was given by the king to his half-brother Odo, Bishop of Bayeux, who held it at the time of the compilation of the Domesday Book. When the contention arose between Odo and the second William, the bishop was deprived of his estates, and Rising was bestowed upon William de Albini, the king's butler (*Pincerna Regis*), ancestor to the Earls of Sussex and Arundel of that name. In Domesday Book it is mentioned as having a fishery and several salt pits, thus evidencing its then closer connection with the sea.

Its great decay is expressly attributed by Sir Henry Spelman, who lived at Congham in its neighbourhood, to the port being stopped up with sand; and he further observes that it was a borough of such antiquity that the royal archives and records gave no account of it, but that the Romans most probably had a place of defence there, as some of their coins had been found in the district.

The castle, which is now a magnificent ruin, was built after the grant of the town and lordship by William II. to William de Albini; probably by the latter's son, the first Earl of Sussex, who died in 1176. According to the account in the *Munimenta Antiqua* it was constructed on the site of one of King Alfred's great castles, of which some arches included within the subsequent buildings are supposed to be remains, but this may, perhaps, be doubted. It seems to have been by its site a place of great strength and consequence. In the eighteenth year of Edward II.

that king sent his precept to Lord Montalt, its lord, to have great care and guard of it on account of the approach of Mortimer, after whose death Isabel of France, Edward's Queen, was kept in confinement here for some years from 1330. It is now recognised, in opposition to the statement contained in Blomefield's *Topographical History of the County of Norfolk*, that that queen did not die here, but at Hertford.

For many years afterwards men of renown were honoured with the post of Constable and Governor of the Castle, and not so long ago, before the Reform Act, the borough, in spite of its consisting of a few cottages only, almost rivalled Old Sarum in returning two members to Parliament.

Having thus briefly sketched its history, it does not surprise us to find that Castle Rising possessed a mint in its earlier days, though I have not been able to trace any undoubted record of its existence beyond that furnished by the penny of Stephen in my collection, of which an illustration is prefixed to this paper. This coin is of the type of Hawkins, 268, and reads on the obverse STIEFNE, and on the reverse hIVN ON RISINGE. The representation of this type in Hawkins is somewhat deficient so far as the details of the reverse are concerned, but these are well rendered in Ruding, Supp. 2, ii., 18. My piece is clearly issued from the Castle Rising Mint, as there is no other town in England with a name so similar as to affect that attribution. The name of the moneyer throws no light on the subject, as it occurs, so far as I can find, on no other coin of the period, though there was a moneyer of that name in the reign of Henry III. There were no pieces of either this mint or moneyer in any of

the large finds of Stephen's pennies that have been recorded, such as the Watford Find (*Num. Chron.* xii. p. 138), the Nottingham Find (*Num. Chron.* 3rd Series i. 37), and the Linton, near Maidstone, Find (*Num. Chron.* 3rd Series iii., 109).

In the list of mints of this king Mr. Kenyon, in his second edition of Hawkins (1876), includes Castle Rising, but with a note of interrogation; and offers as his authority only the fact that Ruding mentioned *RISINGES* in his list, although I have hitherto failed to find or hear of any piece with that reading. In his third edition (1887) Mr. Kenyon gives the mint as *RISINGE*, and omitting all reference to Ruding, alludes in a foot-note to a short description of my coin, which was furnished in 1879 to the *Numismatic Chronicle* (n.s. xix., 219), by the late talented numismatist, Mr. H. W. Henfrey, with the permission of Mr. Tillett, of Norwich, in whose possession it then was. In the note thus published Mr. Henfrey expressed his opinion that the coin was of the Castle Rising Mint, and in corroboration adduced the fact that it was found at Norwich in the same county. As neither *hIVN* nor any name resembling it appears in Ruding's list of moneys of this reign, it is clear that that author could not have added *RISINGES* (which differs also in having a final S) to his list of mints upon the authority of this coin.

In any event, however, the existence of the mint being established, the question arises whether it also existed previously to the reign of Stephen. It clearly was not at work after his reign. It was suggested by the late Rev. D. H. Haigh (*Num. Chron.*, n.s. x. 31), that possibly the very peculiar penny of Alfred, of the type of Hawkins,

620, of which three specimens were discovered at Cuerdale, may have been struck at Castle Rising, at the same time, however, giving the alternative suggestion of Rishangles (anciently Risanger), in Sussex. This piece has on the obverse the bust of the king to the right, and the legend ÆLFRED REX, and on the reverse, between the two lines containing the moneyer's name and vocation, ÆDELVLF MO, is a monogram which Mr. Haigh, to sustain his contention, read ROISENG or ROISENGER. That the reading of this monogram is neither clear nor easy, is evidenced by the fact that Hawkins suggests our reading CROINDEN, and that the mint may be Croydon. This last interpretation is to my mind an impossible one, and of the two I prefer the former, though I should be much disinclined to adopt it without further proof. The foreign influence upon many of the apparently English coins found at Cuerdale is of so puzzling a nature, that for the present the problem connected with this piece must be left in suspense.

A reference to Castle Rising is made by Ruding in his list of mints of Æthelred II., in which he hypothetically attributes RISIC or RIZIC to that town; and Hawkins deals in the same way with RIC under the reign of Cnut, mentioning also RINC, without attempting to assign a mint, and Ruding mentions both RIC and RINC under Cnut's reign without any interpretation at all. The latter author states also that RIC, RICOM, and RITVNE occur upon the coins of William I., but in none of these cases does he attempt to attribute them to any specific mint, and Hawkins omits all reference to them. Both authors give RIC under the reign of Henry I., but Ruding again assigns no mint, though Hawkins attributes it interrogatively to the Castle Rising mint. RIC also

occurs on a penny of the Sovereign type (Hawkins, 228) of Edward the Confessor, and RIN on another type (Hawkins, 229) of the same king.

In our dilemma we naturally turn for some light to Hildebrand's *Anglo Sachsiska Mynt* (2nd ed., 1881), in the hope that if the town really possessed a mint in the days of Alfred, as well as in early Norman times, some pennies of Æthelred II. and Cnut would be found to evidence its intermediate existence. But here, too, it is a case of "confusion worse confounded." Under the reign of Æthelred II. we find a penny with the legend BYRHT-NIOD MO RINI, which the author was unable to assign to any known mint, and it at first suggested itself to me that this might be a corruption of BYORHTNOD MO PINT, which occurs on a Winchester penny of the same reign, and that RIN, RINI, &c., might sometimes be blunders for PIN, PINI, &c., but in the supplement (Tillägg) to Hildebrand is found another penny bearing the inscription BIRHTIOD MO RNM, which scarcely tends to bear out my theory. Hildebrand states that these coins of RINI appear to be of Irish striking and lettering, and he notes that the same moneyer and mint appear upon coins of the Hiberno-Danish prince, Sihtric. I have no doubt but that these pieces furnish instances, of which there are many more, of the falsifications of English types by the Danish settlers in Ireland.

Under the reign of Cnut, Hildebrand gives several coins bearing similar readings, such as RICYEBII, RIE . . II, RIHBIIR, RINHE, RIEB . . II, and RICZZA, all attributed by him to RICYEBYRIG, which he translates into Rising Castle or Richborough. Presuming that the latter town (the ancient Rutupiæ) were then in active existence, no other place could, so far as the name goes, so well meet

the difficulty with regard to most of these last-mentioned readings, but there is no record of its having survived its importance as a Roman fortified place. On the other hand, however, the "Portus Rutupensis" must have been a port of arrival and departure of some consequence in those days, and as, with very slight exceptions, the series of coins of Sandwich (which being incorporated by Edward the Confessor, to some extent rose with the decline of Richborough) do not appear until those with RIC, &c., ceased to be issued, it is just possible that Richborough possessed the mint which, on its decay, passed to the rising town of Sandwich. It is a strange coincidence that Sandwich, in common with Castle Rising, lost its importance in Mediæval times, probably about the beginning of the sixteenth century, owing to its harbour being also choked up with sand, although it had previously attained the position of being one of the Cinque Ports; a position which, in spite of its present decadence, it still enjoys. The moneyer on the coins mentioned by Hildebrand is generally SIRIC, probably a contraction of SIGELRIC, in the same way as we find ÆGELPINE and ÆLPINE, ÆGELPARD and ÆPARD, ÆGELPERD and ÆLPERD, &c. If it could be considered to be a contraction of SIHTRIC, a further connection would thereby be created between coins of this series and those of Æthelred II. before mentioned, but it must be remarked that a moneyer bearing the same name SIRIC, appears to have coined at Norwich in the time of Cnut. The mint RICZZA approaches more nearly to the word Rising, and the moneyer responsible for the coin bearing it is VLF, a not uncommon Danish name. These facts, substantially, though not conclusively, tend to indicate an origin in that eastern portion of England, which was not only so frequently subject

to the attacks of the Danes, but was also extensively colonized by them at various periods of our early history.

Mr. Lindsay, in his *View of the Coinage of the Heptarchy*, suggests the attribution of RIHB to Ribchester, in Lancashire. This might not be so unlikely an attribution for some of the pieces mentioned, as this place, the *Coccium* of the tenth Iter of Antoninus, was one of great consequence in the time of the Roman occupation, ranking as one of the first cities in Britain. Another reference which may be useful, may be made to C. J. Thomsen's *Description des Monnaies du Moyen Age* (Copenhagen, 1873), who, under the number 9,528, describes a penny of Harold II., reading PVL PNE ON RICEE, which he doubtfully attributes to Rieyebyrig? (Rising Castle?)

There is a Risborough in Buckinghamshire, where Edward the Black Prince is said to have had a palace; a Risbury in Herefordshire, at which there are remains of a Danish camp; a Risby in Lincolnshire and in Suffolk; and other places with somewhat similar names, but none of these would appear to have possessed a mint.

The coin above depicted is the only piece which I have actually met with, undoubtedly bearing upon the face of it the name of the town of Castle Rising. Whether any of the other pieces mentioned by me can be attributed also to that mint, is a question which requires further elucidation.

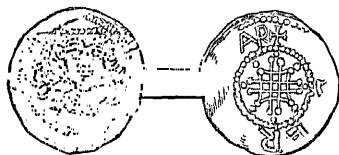
H. MONTAGU.

X.

COINS OF THE REIGN OF STEPHEN.

THE coins of the reign of Stephen, like those of Charles I., are always of great interest to collectors. I therefore venture to send you sketches of two coins of the former period, which I consider both rare and interesting. As a collector of many years' standing, it has been my good fortune to acquire several types of this period, but none of them exceed in interest the two I am about to describe.

I would here refer to Hawkins, second edition, page 183, where there is an account of the only two known kinds of coins which are attributed to William, the second son of Stephen. It is evident, however, that Mr. Hawkins is incorrect so far as the coin in the British Museum is concerned, which is of exactly the same type as the one I possess, and having the large pierced stars each side of the head. The following is a sketch of the coin in my cabinet.

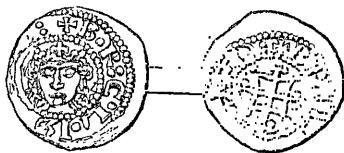


The mint, however, of the British Museum specimen varies from mine, and reads WIS, while my coin has the

ending . . AR. There are also some minor details which do not agree, but otherwise the type is the same.

Though these coins were evidently struck by different moneyers, yet it is my impression they belong to the same district, the lettering on the obverse pointing almost to the same handiwork. If so, it is an interesting question whether they really belong to William, son of Stephen, or to some baron of the same Christian name. I must admit, however, that I incline to the former theory.

The other coin in my possession is, to my thinking, a very puzzling one, as the next sketch will show.



Here we have on the obverse a *crowned* head of the true Norman type, grim and forbidding to a degree. In the field on either side of the head is a large pierced star, the same as on the William's coin. That on the left-hand side is indistinct, but two stars may be traced.

As regards the legend; instead of any king's name we have the following letters, B.R.C.IT.I., and then appears a blurred S, followed by some letters, which appear undecipherable. The reverse of the coin is the same as Ruding, Supp. II., Plate II., Figs. 1, 9, 21, also Hawkins 628. The moneyer's inscription reads BRILI . . . TO.

Reverting to the legend, I have taken considerable pains to find a meaning for the B, but cannot discover any clue. The R may mean Robert, and the C may be a

contraction for COMES (See Rud. Supp. II. Plate II. 21), which might possibly point to Robert, Earl of Gloucester. The IT. may represent Justitiarius, supposing the Earl had assumed the office of Justiciar in Matilda's interest, though we know that Roger, Bishop of Salisbury, held that important post during Stephen's reign. I confess that the above attempts at explanation do not satisfy my mind, and I therefore wait for some better light from the learned members of the Numismatic Society.

My own theory is that this coin was struck in Somersetshire by some great baron who had espoused Matilda's cause. And, though a digression, I would venture to suggest that both the following coins, Rud. Supp. Plate II. Fig. 1, and Hawkins 628, attributed respectively to William II. and Henry I., were issued by barons in the same county of Somerset. Ruding's mint I take to be Radstock, and Hawkins 628 is clearly Wiveliscombe. The place TO on my coin I assign to Dunster, anciently called TORRE, where a powerful Norman baron kept his stronghold as a partisan of Matilda. All the above places are in Somersetshire, where the Empress had a strong following. I think my coin fixes clearly the date of the other coins, the three fleurs-de-lis being such a distinctive mark of Stephen's reign.¹

It is much to be regretted that the inscription on the obverse is badly struck just where it might be of importance. With this exception the letters are all well shaped, and the coin is of much superior workmanship to what is usually found. Both the coins are of fine silver and weigh each about 16 grains. I am not aware that either

¹ I observe that Mr. Hawkins hints that the coin, his No. 628, may be of Stephen's period.

of them has previously been published, nor am I able to say where the coins were found.

King Stephen's troubles have long been over, and his quarrelsome barons laid to rest. Even their proud castles were in many cases razed to the ground in the following reign of Henry II. But as we contemplate these coins, they seem to bring home to us more clearly the state of the country in that eventful period, and we can realise more fully the anarchy that prevailed during those years of civil war: a war which, for its lengthened horrors, is without parallel in English history.

SAMUEL PAGE.

XI.

THE READING PENNY.

THE Reading penny, amusingly enough, is, by the books and catalogues, classed under Edward I. The reply to Sainthill from Cuff is worth repeating: "Mr. Lindsay, you say, agrees with you in the belief that the coins sent as of Edward I. really belong to Edward III., for the reasons assigned in your communication. I confess I do not like to disturb their present arrangement. The reasons you assign for removing them have considerable force, especially that of the legend divided by annulets, which I only know on the pieces of the Third Edward. The English N, too, is something more in your favour. The weight, upon which we usually build so much, in this case I think little of. Lastly, with regard to the portrait, I can only say that I prefer the definite and tangible circumstance of the different readings of the name to the skill and taste of the physiognomist."

Hawkins had a strange notion that the shoulders of the bust on coins of Edward I. or II. are always more or less clothed, but never on the coins of Edward III. Bergne was more reasonable than Cuff and Hawkins. He weighed a penny reading EDWAR with, as he says, "that peculiar head which occurs on (I think) all the pennies which have the Saxon N. I have put it in the scale against every

penny I have of the undoubted type of Edward I.; and, although some of them are a little rubbed, there is only one which does not outweigh this one which I describe above, and which I think cannot have lost half a grain of its original weight. My scales are not good ones, but according to them it weighs between 19 and 20 grains: it outweighs 19, but goes up at 20. Now, a Durham penny in my cabinet, which, from the lion mint-mark we know to have been struck by Bp. Beaumont from 1316—33, brings down 21 grains, though inferior in preservation, or at least not better than the one which I have mentioned, which will not go 20 grains. The legitimate inference therefore is, that it and similar pieces were struck between the 18th year of Edward III. (when the weight of the penny was reduced from 22 to $20\frac{1}{4}$ grains) and the 25th year, when it was further reduced to 18 grains."

I may at once remark that in spite of Cuff and Hawkins, and trusting more to Bergne's "peculiar head" than to the fancies of Cuff and Hawkins, I weighed Bergne's splendid specimen of the Reading penny, and found it, as I expected, light. The beautiful coinages of $20\frac{1}{4}$ and 20 grains are easily connected, by mules, with the 22 grains coinage and the 18 grains coinage. But the transitional styles had better make the subject for another paper.

The divorce between the Reading penny and the Reading halfpenny ought to have been a sufficient signal-post.

Let us now look at the documentary evidence.

It seems that Æthelred II. appears on a coin reading RAID; that Henry I. granted to his monastery of Reading a mint and one moneyer there; that Stephen confirmed Henry's charter, providing that mint and moneyer

were to be in *London*; and that Henry II., in one of his charters, left it optional whether they should be in Reading or in London. Richard I. confirmed that grant, and in King John's charter the mint and moneyer were fixed at Reading. Henry III.'s charter notices neither place nor moneyer. Subsequently, however, the Bishop of Salisbury, by royal command, granted to the Abbot of Reading one moneyer in London, where he was authorised to coin as if he resided in Reading, with succession in favour of future moneyers. If, except the RAID penny, any coins of the Abbot of Reading, in Henry III.'s reign or before, exist, they will be undistinguishable from those of other London mints. No Edwardian coins attributable to Reading, whether struck at Reading or at London, except the escallop ones, are known. In Edward II.'s charter of confirmation, which expressly excepts the clause as to mint and moneyer, we cannot accept any idea that such an imbecile monarch, for no ostensible purpose, would have dared to interfere with any customs used in the time of his father, King Edward I. The inference is that the mint of Reading was practically extinct. We know little or nothing as to the early days of the heavy coinage of Edward III. But, through mules, we know that it terminated in a strange attenuated lettering, and that the elegant coinages of $20\frac{1}{4}$ and 20 grains merged into the ordinary ones of that monarch.

Bergne, who, as to physiognomy and weight, was more critical than Cuff, allowed me to weigh his fine specimen of the Reading penny. It was light, as I expected it would be, and he made some guarded remarks upon the intermediate coinage of Edward III., which were to the effect that the coins in question undoubtedly presented unusual treatment. Independently of the indisputable

evidence of the mules, no one ought to have any difficulty in detecting the intermediate types of Edward III. The crown, the face, the weight, and the delicate lettering are sufficient. As to the abbreviations of the king's name and his clothing, ideas about these are only ideas. The die-sinker had his own convenience, and probably to a considerable degree his own taste, to consult.

The coins with the attenuated lettering were probably struck at Antwerp, or at all events from foreign dies. The reductions in weight from 22 grains to $20\frac{1}{4}$ and to 20, apparently took place at some time between 1343 and 1351. Ruding and Hawkins seem to differ as to dates. However this may be, the king, on 8th November, 1338, issued a writ, declaring that he had granted to the convent of Reading that they and their successors should for ever have one moneyer and one die for the making of halfpennies and farthings as well as sterlings, which they had been accustomed to make. The writ commanded the treasurer and barons of the exchequer to deliver, without delay, one die for sterlings, another for halfpennies, and a third for farthings, provided that the die for sterlings should not be sufficient for making the halfpennies and farthings also. This, if Ruding has correctly understood the cartulary, is a most extraordinary provision, unless indeed we understand, which we hardly can, the die to mean only punches. Another writ, dated on the 17th of the same month, directed Flete, the warder of the king's mint in London, to make without delay three dies for sterlings, halfpennies, and farthings for the making of money in Reading, with such impression and circumscription as the abbot should appoint.

The abbot, or the die-sinker employed, may or may not have seen Bishop Bek's early pennies, whereon he placed

his cross-moline in the first quarter of the reverse, or some coins of Berwick with the bear's head. The same process, however, was adopted by the Abbot of Reading, who placed an escallop in one of the quarters on the reverse of his pennies and halfpennies. The farthings are unknown. And so, with this brilliant conclusion, the Reading mint ceased its life during the reign of King Edward III.

W. H. D. LONGSTAFFE.

XII.

THE M.M. LIS, ON THE GOLD COINS OF HENRY VI.'s RESTORATION.

ONE of the two half-angels of Henry VI. in the British Museum has the unusual m.m. lis at the end of the legend on the reverse, and reads

HENRIC' A DEI GRAT' REX A ANGL A S A FR
O CRV A X A TVE A SPES VY RICAF.

[See Kenyon, p. 54 (33).]

This corresponds with an angel in my own small collection which, though rather worn, bears the same m.m., a lis on the reverse, reading—

HENRIC A DEI GRAT' REX A ANGL A S A FRANCIE
PER CRVC TVT' SALVT' RO' XPI' RADER A TOR.

The dragon's tail is curled up under the angel's wing, and there is a bowsprit to the ship. The weight is 78 grains.

I have not been able to hear of any other angels bearing this m.m. ; but perhaps such are to be found, as there are several half-angels, I believe, which do so.

It is at least a fair conclusion, I think, that the m.m. differentiates these coins, either as to the period of their issue or as to their place of mintage, from the ordinary angels with the m.m. cross, unpierced or pierced. The accounts of the coinage of the short restoration of King Henry, or rather the reign of the Earl of Warwick, from

October, 1470, to April, 1471, only tell us of an indenture made with Sir Richard Tunstall, Master of the Mint, as late as March 7, 1470—71, which would give little more than a month for the whole coinage. This seems, on the face of it, apart from an incidental point of evidence noticed further on, most improbable; and I would suggest that there must have been another indenture now lost, as many records of this reign are, under which coins were issued at a much earlier period in the six months' reign. One of the first things which a sovereign does is to strike money, and it is hardly likely that Warwick should have waited till Edward was on the point of invading the country before doing so. It is possible, then, that this earlier issue may have had the *lis m.m.*, and that under Tunstall's Indenture were struck the coins with the cross; and, as it is clear that in the month after the date of that Indenture there would be no time for a large issue to get into circulation, this may be a reason why the common angels now extant bear so little signs of it, while that with the *lis* is fairly worn in comparison. But, though this may be, there is another hypothesis, which I advance with the utmost diffidence, as the great authority of both Dr. Evans and Mr. Montagu is inclined against it; and that is, that, while there may have been more than one issue of coins in London, it is unnecessary to presume the existence of another *m.m.* besides the two varieties of cross in that mint in order to suit these two coins, when it is ready to hand in the York mint, where it was the common mark at this time. So much so, that from its occurrence on a quarter ryal of Edward IV. Mr. Kenyon (pp. 67, 68) attributes that coin to that place.

In the face of the opinions above mentioned, I can only give the following reasons in support of this suggestion.

In the first place the *m.m.* is rather rudely struck, and

is identical with that on the York silver coins of this restoration.

Then, with regard to the coinage of gold at York: Bristol and York were expressly specified, with the Tower, as the places where Bartholomew Goldbeter was to make nobles, half and quarter nobles, with other coins, July 16, 1 Henry VI.; and the same places were mentioned in a similar Indenture with John Paddesley, 12 Henry VI. See Drake's *Eboracum*, Appendix, p. cix.

I do not know that any nobles are known of these provincial mints in Henry VI.'s reign; but the ryals of Edward IV. in 1465, I need hardly say, occur of York and Bristol, as well as of Coventry and Norwich.

Now at the restoration we do find gold as well as silver struck at one of these mints, Bristol, and that, it is submitted, is an *a priori* argument that the issue of one of the other mints, York, which, as appears above, was associated with Bristol for the coinage of gold in the earlier part of Henry's reign, was not confined to silver only.

That gold was struck, not at London only, but at other places besides, which, I think, may be inferred, includes more than Bristol, appears from Rymer, XI. 698, where there is a grant to John Langstrother, Prior of St. John's, and John Delves, Esq., of the office of "*custos cambii et monetæ infra Turrim Londoniar.*," and "*custodiam cunagiorum auri et argenti infra regnum nostrum Angliæ et villam nostram Calesiæ.*" This is dated February 24th, which would apparently imply that the mint was working, as is probable, before the Indenture with Tunstall.

Now for the arguments to the contrary. The chief one lies in the absence of an *Æ* under the ship on these coins, which is such a distinguishing mark on the silver, and which, as well as B for Bristol, &c., occurs on the respective ryals of Edward IV., and in the fact that this B for

Bristol does occur on Henry's Bristol angel. To this I would merely say that it is not conclusive. The only provincial angels known hitherto are the Bristol ones, and the few specimens bearing the initial of the mint can hardly be admitted as proving a universal proposition. The fact that a capital *E* was such a conspicuous mark on Edward's ryals may have been a reason for its omission on any gold coins of Henry; and, besides, that letter does not apparently occur on the coin of Edward himself suggested as coming from York by Mr. Kenyon.

But Dr. Evans also suggests that the m.m. lis is not confined to York on the silver of the restoration; and that it would be remarkable that, while half-angels of Henry VI. are so rare, so large a proportion of those that are extant should, as bearing this m.m., have been struck at a country mint.

I must leave these arguments to be weighed by the Society against those which have been given to the contrary.

I will only add what I fear cannot and will not be accepted as strictly numismatic evidence; but the currency of a coin is often affected by its popularity. Besides the Lancastrian influence of the Honour of Knaresborough and of the Earl of Warwick's possessions near York, the citizens of York were strongly in favour of King Henry. The chroniclers of the time show two striking pictures. They show Edward IV. as Duke of York, publicly doffing his cap in that city and crying, "God save King Harry, King Harry!" and in the same month of March, Henry led through London by the Lancastrians, and their utter failure to get up a cheer for him. In which city, York or London, would his superscription and special badge have then been most readily recognised and welcomed?

A. E. PACKE.

XIII.

NOTES ON COINS OF THE SECOND ISSUE OF HENRY VII.

THE tentative arrangement of the groats of Henry VII.'s second coinage, suggested by me a year ago, has drawn the attention of a few collectors to this series of coins. I have to thank Dr. William Frazer, of Dublin, Dr. Evans, and Mr. Webb for kindly sending me descriptions of some unpublished varieties in their cabinets. The new facts thus brought to my notice compel me to modify slightly the arrangement I had previously suggested.

It is important to note that the cinquefoil mint mark was used at two distinct periods whilst these coins were being struck. Dr. Evans first called my attention to this fact. The earlier, or *heraldic cinquefoil pierced*, is found usually on groats which have crowns with plain arches; the *later cinquefoil*, which is irregular in shape, being composed of three broad and two narrower leaves, is found only upon those coins which have crowns with ornamented arches.

This *later cinquefoil* seems to be the immediate successor of the *m.m. leopard's head crowned*. It is unnecessary to repeat the general principles on which, as it seems to me, these coins should be arranged. But, with the facts now before me, I am disposed to suggest the following order.

I. Groat with a cross in saltire at each side of the

king's neck. *No m.m., or with m.m. trefoil.* Mr. Webb has a variety with a lys, instead of a small cross, at each side of the king's neck. He describes the king's face as long and thin.

II. *The Portcullis pattern groat.*

III. Groat with no m.m. on the obverse, and with *m.m. a small cross*, before **POSVI**, on the reverse. This coin is in Mr. Frazer's collection. It has no crosses by the king's neck, and therefore is apparently later than the portcullis pattern groat.

IV. Groat with *m.m. heraldic cinquefoil pierced*.

V.—VII. Just at this point of the series must be placed groats bearing the mint marks lys issuing from a half-rose, leopard's head crowned, and later cinquefoil. Their close connection is proved by some coins which bear double mint marks. Of these we have :—

(a.) Groats with m.m. lys issuing from a half-rose on one side, and the leopard's head crowned on the other.

(b.) Groats with m.m. later cinquefoil on one side, and leopard's head crowned on the other.

In what order then did these three mint marks come into use? Obviously the leopard's head crowned must stand in the centre, for it is the only mint mark of the three which is connected with both the others. But of the two remaining to be considered, which is to be placed first, and which last? Only a very short space of time could have taken place between the striking of the earliest and the striking of the latest of this group of coins. They vary but slightly in detail, and I feel great diffidence in expressing any opinion on the question. But such slight modifications of type as I have been able to trace seem to indicate that the coins bearing m.m. the later cinquefoil should be

placed last of this group. The series would then be continued thus :—

V. Groat with *m.m. lys issuing from a half-rose*. Mr. Webb has a groat bearing this mint mark on the obverse, and with the leopard's head crowned on the reverse. He has also another groat with the position of these two mint marks transposed.

VI. Groat with *m.m. leopard's head crowned*. A groat in my cabinet has for obverse m.m. the later cinquefoil, and on the reverse the leopard's head crowned. Dr. Evans and Mr. Webb possess similar examples with these two mint marks on the same coin.

VII. Groat with *m.m. later cinquefoil*. On these coins the crown is of double arches, the outer bars being ornamented with crockets, while the inner bars are plain. The cusp on the king's breast is fleured. Small crosses are used in the legend as stops. On a coin in the collection of Dr. Evans the earlier or *heraldic cinquefoil* reappears. This groat differs in many respects from the earlier group of coins of this second issue, which bear the same mint mark, but has many points in common with some of the groats bearing the escallop mint mark. The king's crown is ornamented with crockets on both the outer and inner bars. Then, too, in the king's name, and in the words **DEV**M and **ME**V**M**, there is the peculiarly shaped **E**, which is also found on many of the groats with the escallop mint mark. It has a Roman **M** at the end of **DEV**M, and at the beginning and end of **ME**V**M**. Rosettes are also used as stops ; but the cusp on the king's breast is not fleured.

Other specimens with the later cinquefoil have both the inner and outer bars of the crown ornamented with crockets, the cusp on the king's breast fleured, and rosettes

for stops. But these have the closed Lombardic &. They are transitional coins which help to connect coins bearing the later cinquefoil mint mark with those which immediately follow.

VIII. Groat with *m.m. escallop*. Mr. Webb has a very peculiar groat bearing this mint mark on the obverse, and with the earlier, or heraldic cinquefoil, on the reverse. The arches of the crown are more convex than usual. The king's hair looks as if it had been brushed away from his face, and stands almost straight out on each side. None of the cusps of the tressure are fleured. The coin has the peculiar £ mentioned in Hawkins' *Silver Coins of England*. It was formerly in Mr. Neck's collection. The reappearance of the heraldic cinquefoil after long disuse is not easily to be accounted for. But coins with the escallop mint mark are entirely different from all others of this series, and baffle any attempt at tracing a gradual development of type through them. On a large proportion of them rosettes are used as stops.

IX. Groat with *m.m. anchor*

X. Groat with reverse *m.m. rose*. In the collection of Dr. Frazer is a very rare coin with obverse mint mark greyhound's head, and reverse mint mark rose. This coin has a crown of double ornamented arches, and is thus connected in type with the earlier variety of coins bearing the greyhound's head mint mark. Small crosses occur in the legend as stops. The cross dividing the reverse has flat ends. Dr. Evans has a similar coin, but with the inner arches of the crown plain.

XI. Groat with *m.m. greyhound's head*. The earlier coins bearing this mint mark have crowns with double arches; the later coins have crowns with single arches.

XII. Lastly, the groat with *m.m. cross crosslet*, and single-arched crown, described fully in a previous paper. (*N.C.* 3rd Series, vol. vii. pp. 317, 318.) A coin in the collection of Dr. Evans, however, shows that though groats with the crosslet mint mark usually have the single-arched crown, this rule is not without exception. The coin in question is an early variety bearing a double mint mark. On the obverse it has a cross crosslet, and on the reverse a greyhound's head. The king wears a double-arched crown, the cusp on his breast is fleured, and small crosses are used for stops.

In the previous paper the gradual depression of the arches of the crown and the change from bushy to wavy hair were noticed. The development of the form of the large cross, dividing the reverse, was hinted at, but not fully explained. An examination of that will show that:—

(i.) On the early groats, up to and inclusive of the group bearing the heraldic cinquefoil mint mark, the ends of the cross are moline. The moline cross on the reverse corresponds with the crown with plain bars on the obverse.

(ii.) The next group has a kind of cross fourchée, the ends of the cross being divided by a circular incision. This form of cross is found on groats which bear the mint marks *lys* issuing from a half rose, leopard's head crowned, and later cinquefoil.

(iii.) On the escallop groat the furcation is elongated and made more slender.

(iv.) A cross pattée, having a slight central depression in the ends like the top of a crutch, is found on groats bearing the anchor mint mark.

(v.) The ends of the cross are flat on groats with the

rose mint mark on the reverse, and with the greyhound's head mint mark.

(vi.) The crutch form of end, but rather more depressed in the middle, reappears on some groats with the greyhound's head mint mark, and on all groats with cross crosslet mint mark.

The arrangement suggested above is not yet entirely satisfactory. More evidence is wanted as to the position which should be accorded to the later cinquefoil mint mark. Perhaps some collector, on perusing these notes, may be able to supply the proof that is needed to establish the order now proposed ; or, on the other hand, to show how the arrangement might be amended.

G. F. CROWTHER.

XIV.

MISPLACED COINS.

RICHARD IV.'s GROAT.

THE singular groat (Hks. 646) presenting the name of Richard in conjunction with an arched crown, must, I think, be removed from Richard III. and quoted under Henry VII.'s reign as a piece struck for Perkin Warbeck under his assumed name of Richard IV. It is improbable, if Richard III. introduced an arched crown into the mintage, that his imperious successor would revert to the simple open crown which he adopted. Mr. Kenyon queries the mint mark on the obverse as a rose and pellet, and that on the reverse as a rose, or rose and sun united. There is also a rose on the breast. The weight is only 37 grains, instead of 48 grains, and as it only brought £1 14s., there was, I believe, some doubt as to its genuineness. Anyhow, the light weight seems to take it out of the general run of the coinage.

As to the roses, it will be remembered that the Duchess of Burgundy, sister of King Edward IV., who treated Perkin as her dear nephew, the living image of Edward, bestowed on him the cognomen of "The White Rose of England," which was continued in the epithet "The White Rose" applied to his widow, the beautiful Lady Catherine Gordon. On the singular piece supposed to have been struck by the Duchess for distribution among Warbeck's followers, the obverse presents a fleur-de-lis

and a rose both crowned, in badge-like fashion. On the reverse are a fleur-de-lis and lion passant as they occur on some of the Anglo-Gallic coins. Below them is a rose, and above it and them is a crown. The obverse presents a crocketed crown above the quartered arms of France and England.

To come back to our groat. Although Perkin, latterly, assumed the title of King of England and France and Lord of Ireland, he would have to be more careful during his residence at the court of France before he had to retire to the Duchess of Burgundy. There seems to be no reason why Perkin might not agree to do what George III. eventually did, and give up the empty claim to the throne of France. At all events, the French title is omitted on the groat in question, and the English one lacks a letter, reading $\pi\eta\lambda\iota\alpha$.

The groat seems to be copied from the first type of Henry's arched-crown coins, the arches being plain. But while Henry's ball and cross ascend into the legend and preclude a mint mark, in this groat they are kept down, so as to allow of the rose being introduced. The hair is that of the preceding open-crown groats. As time rolled on, Henry seems to have grown tired of the somewhat Egyptian conventionality of his predecessors, and to have introduced a flowing disposition of his locks, finding room also for a mint mark, not by lowering the globe and cross, but by planting it alongside of them. Lastly, we see the outer arch crocketed, but the inner one still plain. And then comes the full-blown set of four arches all crocketed.

I need not point out that the Warbeck coins have their interest as to the chronology of Henry's. All along the Pretender had money, supposed to have been contributed by the King of France on the sly, and by the Duchess openly.

W. H. D. LONGSTAFFE.

XV.

UNPUBLISHED GOLD COINS OF JAMES I.

In 1887 (*N. C.* 3rd Series, vol. vii. p. 342) I called attention to the gold coins of James I., and gave a list of no less than twenty-eight pieces, which, so far as their mint marks were concerned, were not recorded in Kenyon's *Gold Coins of England*. In the same note I stated that several other pieces of the same reign should, in my opinion, be in existence, although I had hitherto failed to meet with any of them, and of these also I gave a list. I can now report to our Society that of these I have since discovered the following:—

Double crown, m.m. book.
Angel, m.m. book.
Britain crown, m.m. key, book and crescent.
Thistle crown, m.m. key.
Half-crown, m.m. grapes and mullet.

And I have, in addition, also met with examples of the following unpublished pieces, the existence of which I had not predicted, viz. :—

Unite 2nd coinage, m.m. rose, but with plain and not ornamented armour.
Unite 2nd coinage, m.m. saltire cross.
Rose royal, m.m. grapes (described as m.m. thistle in Henderson sale, 8th June, 1888).
Half laurel, m.m. thistle (Henderson sale).—

thereby adding to my list twelve coins of this reign with omitted mint marks, and making a grand total of forty unpublished pieces. I do not cast any reflection upon Mr. Kenyon's work in respect of even so important an omission as this, having regard to the circumstances under which such work was undertaken; but what shall we say of our National Collection, which is not only without any of these pieces, but fails, in addition, to possess examples of sixteen other gold coins of this reign, described in the work referred to from specimens in the cabinets of Dr. Evans, myself, and others? The Museum grants are of so inadequate an amount that no one could well blame its authorities if they almost wholly exhaust the small means at their command, in endeavouring to keep pace with their continental competitors and fellow-workers in their struggle for new types of Greek, Roman, and other more ancient coins. If they fail to obtain these when they can, it may be that another opportunity may never occur. With regard to English coins, the case is somewhat different, as these very seldom leave the country, and it can never be known when some lucky find, gift, or bequest may be forthcoming to supply deficiencies. On the other hand, we may fairly demand that such deficiencies should be made good at a somewhat more rapid rate than has been indulged in during the course of the last few years.

In the recent sale of the Hon. Mr. Marsham's coins (Lots 472 and 473) were two pieces described as a "Fine sovereign of third year, m.m. portcullis," and "Thirty-shilling piece, m.m. scallop." This was an error on the part of the compiler of the catalogue, the mint marks on the respective coins being the heretofore recorded ones of the scallop on the sovereign and the lis on the thirty-shilling

piece. In exhibiting to the Society an angel, m.m. book, now for the first time published, I take the opportunity of also submitting an Unite with the same mint mark, which really appears to represent a closed and clasped book, and not an heraldic billet, as suggested in my last note. While upon this point I may add that both Folkes and Snelling refer to the m.m. crescent as m.m. half-moon, which it clearly is not.

I must now conclude by a special reference to the most interesting discovery of the Unite, m.m. saltire cross, an example of which I also exhibit. In my previous note I stated that I had never seen or heard of this mint mark as actually occurring upon the coins of this reign, and I referred to the fact that Mr. Kenyon had included it in his list of mint marks of the gold coinage, and Mr. Hawkins among those of the silver coinage without any coin to which it is attached being noted by either author. I am afraid that this was tantamount to my expressing a doubt as to its actual existence, a doubt which I am now enabled to withdraw. Snelling, in his *View of the Silver Coin and Coinage of England*, gives the saltire cross as a mint mark which was adopted on the 9th June, 1619, following, as to this, Martin Folkes, who, in his *Tables of English Silver and Gold Coins*, 1763 (pp. 69, 70), includes the mint mark in his list, but expressly adds that no silver money was marked with the half-moon or saltire cross. He makes no special remark as to its occurrence upon gold coins, but, so far as I can ascertain, no piece bearing it has ever been before recorded by any author, nor have I been able to trace any such piece in any collection or sale. Inasmuch as the King was always anxious to hold an even hand between his two kingdoms, inclining, it is true, in the earlier part

of his reign a little too much for the taste of his English subjects to his Scotch proclivities, it is not at all surprising to find that after the adoption of the St. George's or plain cross as a mint mark in 1618, the St. Andrew's or saltire cross should have been ordered in 1619. This may have been influenced, also, by the fact that in the latter year the King was absent in Scotland, certainly on the 30th March, and presumably later. I trust that I shall still be enabled to add to the list of omitted mint marks on gold coins of this reign, as there are still evident gaps which, in my opinion, will sooner or later be filled up.

H. MONTAGU.

XVI.

PIEDFORTS IN THE ENGLISH COINAGE.

UNDER the name of Piedforts are included all such impressions from dies as are struck upon flans of extraordinary thickness. Both in this country and abroad they are the results of experiments, and sometimes mere freaks on the part of the coining authority or of the engraver, and they most often occur in connection with patterns for proposed new series of current coins. It is, and always has been, against the spirit of our English coinage to distinguish coins of different denominations by difference of weight only, and there is no instance which can be cited to the contrary. The various denominations are always evidenced by variations in module, and most often also by a change more or less material in the design. In connection with these remarks I would call attention to three very rare pieces of which I have examples in my own cabinet.

- (i.) The so-called double sovereign of Henry VIII. ;
- (ii.) The so-called double sovereign of Edward VI. ; and
- (iii.) The so-called fifty-shilling piece of Oliver Cromwell.

Of each of these pieces there are impressions on thinner flans struck from the same dies, intended to be current sovereigns or broads of the same reigns or periods. So

far as the two firstly-mentioned pieces are concerned, double sovereign pieces of neither Henry VIII. nor Edward VI. were ever ordered or agreed to be struck. Mr. Kenyon, in his work on the *Gold Coinage*, expressly states that what was known as the double sovereign of the first coinage of the former king was probably a pattern, and mentions, as is the fact, that the specimen in the National Collection weighs as much as 788.6 grains. This example is very inferior in condition to mine (e Dimsdale, Thomas, and Marsham Cabinets), which weighs 476 grains only, and I believe that no other specimen is known. The mint mark on the obverse is a lis, and on the reverse a cross-crosslet. A so-called double sovereign of the second coinage of Henry VIII. is also in the National Collection, weighing 470 grains, with m.m. obverse, lis, reverse, pheon. Both these and all similar coins must, in my opinion, be treated as Piedforts of the sovereign.

When we come to the reign of Edward VI. we find what would be further complications, were it not for the application of the rule which I have laid down. Mr. Kenyon describes a so-called treble sovereign of the second coinage, weighing 505 grains, with m.m. γ , and, therefore, of the Southwark mint, which is in the National Collection, but which is, clearly, only a Piedfort of the ordinary sovereign of that mint and coinage. My piece of that reign is of the third coinage, with m.m. ostrich head, and weighs 476 grains. I know of only two other examples of this, both in the National Collection (one having formerly been in the Bank of England Collection), and I can only apply to them an attribution similar to that which I have suggested with reference to the heavier piece of the previous coinage.

The so-called fifty-shilling piece of Cromwell appears to be nothing more nor less than the original pattern for the broad or twenty-shilling piece. It is from the same die, but differs, firstly, in being of the weight of 351 grains or thereabouts (the weight of the broad being strictly $140\frac{1}{2}$ grains); and, secondly, in having the edge inscribed with the words PROTECTOR LITERIS LITERÆ NVMMIS CORONA ET SALVS. Both Snelling and Henfrey expressed the view which I have adopted on the subject of this coin, and it seems clear that the inscription on the edge was originally intended to be on the edge of the broad also, which, however, was, in all probability, found to be too thin to bear it conveniently. The design was that of Thomas Simon, although Blondeau was entrusted with the task of striking the coins, and the inscription is expressly referred to in the Minutes of the Meeting of the Council of the 27th November, 1656, at which "His Highness" personally attended. These Minutes, it need scarcely be said, contain no reference to the issuing of any coin of so abnormal a denomination as a fifty-shilling piece.

Other Piedforts exist in connection with our English coinage, such as the so-called six-angel piece of Edward VI. (distinctly a pattern only, as no other piece is known to bear the same design), an unique specimen of which is in the National Collection, in which is also a very thick Piedfort of the rare pattern testoon of Edward VI. of the year 1547. A Piedfort of the same piece, on, I believe, a still thicker flan, is in the Hunter Collection. I have also in my own cabinet Piedforts of the Canterbury penny of Edward II., of the London halfpenny of the same or preceding monarch, and of the London half-groat of Edward III.

In addition to these may be mentioned the so-called two-shilling piece of Cromwell, which has generally been considered to be a re-strike, by J. S. Tanner, in the reign of George II., of the shilling of the Protector. As a matter of fact, as pointed out by Henfrey in his *Numismata Cromwelliana*, it was clearly struck from fresh dies completed by that artist from the original punches for the shilling which had been engraved by Simon. The so-called ninepence is in the same way a re-strike from the altered punch of the sixpence. The inscriptions on all Tanner's reproductions of Cromwell's coins are of his own handiwork, and differ in many respects from the lettering of the period; in addition to which is the notable omission of the "&c." in the obverse legend.

There is one apparent exception to my rule which requires some explanation. I refer to the Ramage half-crown and shilling, specimens of which are also in my collection. Here the half-crown is possibly the prototype, and the question is whether the so-called shilling is a mere impression on a thin flan, or was really intended to be a coin of the lower denomination. The written records seem to show that it was. I have a half-crown with the usual inscribed edge and one with a plain edge. The obverse of the latter appears to have been struck from a different die, but the variation is very slight. Were it not that these pieces are admittedly patterns only, and never formed part of our currency, my rule on the subject of Piedforts might be seriously affected. No Piedfort has ever been actually current in this country as money of the realm.

H. MONTAGU.

MISCELLANEA.

MAXIMIANUS HERCULIUS.—The following type of Maximianus Herculus in third brass seems to be unknown:—

Obv.—IMP. C. MAXIMIANVS P.F. AVG. Radiated bust of Maximianus wearing cuirass to right.

Rev.—PROVID . AVGGG. In field, S.P.; in exergue, C. Providence standing to left, holding globe in extended right hand, and cornucopiæ on left arm.

This is obviously one of the rare coins struck by Carausius in British mints, to commemorate the acknowledgment of his dignity by Diocletian and Maximian. Coins of exactly similar reverse, with the three Gs, are known of Carausius himself (Cohen, 270). Like them this piece was struck at the mint of Camulodunum, as the C in the exergue shows. Professor Churchill Babington published some coins of Maximian struck at this mint in the *Numismatic Chronicle* of 1874, but they all bore only *two* Gs; this seems to be the first with three Gs yet discovered. It was bought in a miscellaneous lot at Sotheby's, last summer.

C. OMAN.

FOLLIS OF BYZANTINE TYPE STRUCK BY THE SARACEN KHALIFES.—This little copper coin has many points of an interesting character.

To all appearance it would seem to be a Byzantine coin with the particularity only of being struck upon a flan larger than required.

A close examination shows that together with the large letter M on the reverse as indication of value, there is on the right of it an Arabic word standing for Tiberias, and to the left in Greek characters the word Tiberiados.

The obverse shows three figures standing but bears no legend. They doubtless represent the Emperor Heraclius who was reigning with two of his sons in the year 641 A.D.

The Arabians had at this time successfully carried out the

entire conquest of Syria, including Palestine, and it would seem that the city of Tiberias on the shores of the lake of Galilee was one of their mints.

We are ready to ask why should they strike imitative coins of this kind.

An answer is given by Mr. Gillmann in his Saracen history forming one of the series of *Stories of the Nations*. "At this early period the Arabs had no coinage of their own, the money issued for the Byzantine and Persian empires was made use of to serve their need."

"Under treaty with Constantinople a portion of the tribute due from Syria to the Byzantine Emperor was still to be continued, and this naturally could only be tendered in Byzantine money."

It may be urged that coins of such small value might not be suitable for the purpose of tribute; but they would be useful for purposes of commerce. At an early period of Arabian or Saracen conquest, careful attention was paid to the needs of commercial enterprise.

Mecca itself flourished for many long years only on the profits of successful trading which was carried on by caravans passing through its territory, and people then living might remember Mahomet himself taking part in such undertakings.

These coins, if not thus required for tribute, would be struck then for the convenience of merchants, and as the existing supply of Byzantine money gradually lessened, the various mints in Syria, Damascus, Antioch, Tiberias, Edessa, &c., would endeavour to supply the deficiency by the issue of fresh coins of the Byzantine type both for the purpose of tribute and of commerce.

This arrangement was not of long duration. About forty years afterwards a coinage better befitting the rapidly acquired grandeur of the Khalifes was prepared, and the imitative series of coins were discontinued.

In the reign of Khalif Abd-el-Melek, 685—705 A.D., the tribute was tendered to the Greek Emperor in Arabic money, an offer that was rejected as not in accordance with the treaty agreement.

It is no wonder to learn that the victorious Khalif on hearing of this refusal declined to pay any further tribute at all.

This little copper piece was purchased as part of a lot with others of Tiberius Constantine, and with coins of the first type of the Ommeyyade Khalifes.

W. S. CHURCHILL.

MEDALS BY ITALIAN ARTISTS.—I beg to submit to the Society the following notes on Italian medals in the cabinet under my care.

1. A medal of Matteo de Pasti presents features not referred to by Armand in his great work.

Obv.—SIGISMONDVS . PANDVLFVS . DE . MALA-
TESTIS . S . RO . ECLESIE . CAPITANEVS .
G. The portrait is that described by Armand :
bust to left, head uncovered, hair cut straight
across his forehead, hanging in long smooth
curves on the neck.

Rev.—CASTELLVM . SISMONDVM . ARIMINENSE
[two roses] MATHEVS PASTVS ✠ F . 1446
[rose]. The Castle of Rimini presents the cha-
racteristic features.

The legend of the obverse is that of Armand's No. 7, of the reverse that of No. 8, with this important difference, that the date is given, not in Roman but in Arabic numerals, an unusual feature in Italian medals of that epoch, since it antedates the general introduction of Arabic numerals. There is no possibility of this being a subsequent alteration, the skin of the metal being intact.

2. Medal not mentioned by Armand. Dia. 38.

Obv.—ANTONII . PERRENOT . EPI . ATREBAT.
Bust l., head uncovered, bearded, collar folded
over ruff of mantle.

Rev.—DVRATE. Shield surmounted by Cardinal's hat ;
bendy of 6 ; on a chief doubled-headed eagle.
Beneath, palm and olive branches.

No medal of this size is given by Armand. The legends correspond with those cited II. 255, No. 37, but the obverse differs totally ; I do not know the shield.

3. Medal with reverse not mentioned by Armand. Dia. 95.

Obv.—FRANCESCO DASANGALLO SCVLTORE AR-
CHITETTO FIOREN. FACIEB — MDL. Bust
to left, with long beard, head draped. FACIEB
engraved on shoulder of bust, and MDL engraved
beneath FRANCESCO.

Rev.—TRA STERPI INSIDIE STRATI FAME ET
MORTE. Legend outside of wreath of leaves
and fruit. Within is a rocky pyramid on whose

summit rests the yard of a ship with furled sails symmetrically dependent. On the middle of the yard stands a nude female figure facing, head to left, right arm pointing upwards, left supporting an upright sword; at either side, a column l., and a serpent rearing, r. At the base of the pyramid a dog-headed female figure reclines from l. to r., leaning the right arm on a sphere, the left on a rock. Behind her head appears a lion's face, in front a scorpion ascending the pyramid. The relief of the obverse is bold, the thickness at the peak of the shoulder being 22 centimètres.

4. M. Armand has included in his work, II. 248, a series of French medals in which he thinks, though with reserve, that Italian style may be detected. Among these medals is one, No. 10, of Diana of Poitiers, the first glance at which recalled vividly the portrait of Mary, Queen of Scotland, on the gold ryal. A careful comparison of the pieces justified the recollection. Mary's portrait was said to have been taken by Acheson, and sent to Paris from Scotland for this purpose. Was Mary's portrait the work of Acheson? Are these two the portraits of different women? The resemblance is more than that of style.

J. YOUNG.

HUNTERIAN MUSEUM, UNIVERSITY OF GLASGOW,
25th April, 1889.

COIN OF ULJAITU. Weight 172 grains. Size 1·5.

Obv. Area

لا اله الا الله محمد رسول الله علي ولي الله. امير المؤمنين -
الملك - الحق - المبين - الصادق - الوعد - الامين - صلى الله عليهما

There is no god but God, Muhammad is the prophet of God. 'Ali is the friend of God, commander of the faithful, the prince, the rightful one, the manifest one, the truthful in promise, the trustworthy one. May God pour blessings on him.

Margin :

الهم صل على محمد المصطفى على ا * * حسن * لي والحسين
الشهيد وعلى زين العابدين ومحمد الباقر وجعفر الصادق وموسى
الكاظم وعلى الرضا ومحمد الجواد وعلى الهادي والحسن العسكري
ومحمد الحجة خلف

O God bless Muhammad the chosen, Ali * *, Hasan * *, and Husein the martyr, and 'Ali the servant of God, and Muhammad the great, and Jāfar the true, and Mosi the silent, and Ali the pleasing, and Muhammad the beneficent, and 'Ali the teacher, and Hasan the soldier, and Muhammad the coming proof.

Rev. Area. As usual on the large coins of Uljaitu. Around it Baghdad 716.

ضرب مدينة السلم بغداد سنة ست عشرة وسبعماية

Margin :

التائبون العابدون الحامدون السائحون الراكعون الساجدون
الامرون بالمعروف والناهون عن المنكر الحافظون لحدود الله
وبشر المؤمنين

Koran ix. 113.

Those who repent, those who worship, those who praise, those who fast, those who bow down, those who adore, those who bid what is right and forbid what is wrong, and those who keep the bounds of God. Glad tidings to those who believe! (Palmer's translation.)

M. LONGWORTH DAMES.

ADDENDA AND CORRIGENDA TO 'THE COINS OF THE DURRĀNĪS.'

Vol. VIII. pp. 325—363.

P. 326, l. 19, *for* Nannibāl *read* Nau Nihāl.

P. 330, l. 6, Nūr-u'd-dīn.

Note.—There does not appear to have been any Governor of Kashmīr named Nūr-u'd-dīn. Nūr-u'd-dīn Shāh is, I am informed, the name of a saint whose shrine in Kashmīr is much resorted to. Coins were probably struck in his name during an interregnum, and may be compared to the Persian series struck in the name of 'Alī er-Rīza. This supposition is favoured by the nature of the inscriptions, such as that on the reverse of No. 135, translated on p. 339. This saying is in great vogue among Musalman ascetics. The word *Shāh* also would hardly be used by any Governor not of royal blood, but might be applied to a saint, and *makhḍūm* is used in the same way.

P. 337, l. 9, omit the word شاء. The verse ends properly with زمان.

P. 338, l. 4, for *پرور* read *پرورده*.

P. 338, l. 20, for *راج* read *راشج*.

P. 343, No. 7, for *گند* read *کند*.

P. 347, No. 42, for *کند* read *زند*.

P. 359, l. 1. The name *Altāf Jang* is a misreading, and *Fath Jang* should be substituted. On the specimen described, the only one I had seen, the only letters of the name legible were

لطاف جنگ

which was read as *Altāf Jang*. A more perfect specimen since obtained gives the full reading

سلطان فتح جنگ بادشاه غازی

M. LONGWORTH DAMES.

NOTICES OF RECENT NUMISMATIC PUBLICATIONS.

On the Calendar of the Greeks of Babylonia, and on the Origin of the Jewish Calendar, by THÉODORE REINACH.

Of the various attempts made by Greek astronomers to harmonize the lunar and the solar year, the most successful was that of the Athenian Meton, who invented the cycle of nineteen years, during which seven intercalary months had to be inserted, in order to prevent an increasing discrepancy between the lunar months and the solar year. This was an improvement upon the older system of a cycle of eight years (*ὀκταετηρίς*), during which three intercalary months had to be inserted for the same purpose. From the middle of the fourth century down to Roman times, and until the final adoption of the solar calendar, these two rival systems continued to be used side by side in different parts of the ancient world. It is known that the Athenians, about the year B.C. 340, adopted the Metonian system; on the other hand, the Jews, as well as some of the Greeks, continued to make use of the older eight-year cycle. The object of the present inquiry is to ascertain by means of the dated coins of the Parthian kings which system was followed in their dominions and in the Greek colonies of Babylonia. For this purpose there are only three coins at present available which were struck in intercalary, or, as the Greeks called them, embolismic months, as is proved by the letters **EMB**

or **EM**, which they bear in place of the name of the month. The years in which these three coins were issued were respectively 287, 317, and 390 of the Seleucid era. These, therefore, were embolimic years. Applying to the first and last of these years the eight-year cycle, and working forwards from 287 and backwards from 390, we find that 319 and 318 would have been embolimic, as well as 317, that is to say, we obtain three successive embolimic years, viz., 317, 318, and 319—a result which proves that the *δκταετηρίς* cannot have been the system then in use, for the three intercalary months which had to be inserted in the course of each term of eight years would certainly not have been inserted in three successive years, for this would have brought about a discrepancy of $33\frac{1}{4}$ days between the lunar and solar year at the end of the three years in question. In both systems the embolimic months were necessarily spread over the whole cycle of years, no two successive years being embolimic. M. Reinach next applies to the three known embolimic years, the nineteen-year cycle, and working in the same manner forward from 287 and backwards from 390, arrives at the result that 306, 314, and 317 must also have been intercalary years, from which he draws the conclusion that the seven embolimic years in the cycle of nineteen years, starting from 301, were the following:—303, 306, 308, 311, 314, 317, 319, and consequently that in each successive cycle of nineteen years the seven embolimic months were regularly inserted in the 3rd, 6th, 8th, 11th, 14th, 17th, and 19th years. M. Reinach has thus most successfully proved that the calendar in use among the Greeks of Babylonia and by the Arsacid kings was founded upon the cycle of nineteen years invented by Meton, and he proceeds to argue that when, in the fourth century A.D., the Jews adopted this same Metonian calendar they borrowed it from the schools of Babylonia.

B. V. HEAD.

J. N. Svoronos. *Constellations as Coin Types.*

In this article Mr. J. N. Svoronos offers an explanation both ingenious and original of the types of the silver staters of the town of Mallus in Cilicia (Head, *Hist. Num.* p. 605). These coins bear on the obverse figures of winged divinities, female and male, which the writer supposes to represent Iris, Eosphorus, Zephyrus and Boreas, and on the reverse a conical stone or a swan. The conical stone is identified as one of the sacred *βαίτυλοι λίθοι*, or meteoric stones, which were worshipped in various parts of Greece as idols of the gods. The word *βαίτυλος* appears to be derived from *βαίτη*, the goatskin in which Rhea

wrapped up the stone which she gave Kronos to swallow in lieu of the infant Zeus. As Kronos and Rhea represent the Heavens and the Earth, so the stone which had fallen from the sky would naturally become an object of worship, being identified as the stone which Kronos threw up after having swallowed it. By a natural confusion of ideas these meteoric stones came to be worshipped as symbols of Zeus himself, who in this form was called Zeus Kasios, an epithet which seems to have the same meaning as βαίτυλος, viz. covered with a rough goatskin (cf. Imperial coin of Seleucia Syria, on which the βαίτυλος is accompanied by the inscription **ΖΕΥC ΚΑCΙΟC**). The conical stone on the coins of Mallus is flanked by two objects composed of dots or points which sometimes take the form of bunches of grapes and sometimes of doves. On other examples these symbols are replaced by others in the form of ∇ and Γ . The position on the coins of these symbols grouped round the βαίτυλος is according to Mr. Svoronos identical with that of the constellations which surround the constellation *Taurus* (Zeus in bull form) in the sky. The doves, Πλειάδες, now called the *Pleiads*, was also called from its form βότρυς, "the Grapes"; hence on the coins the cluster of dots assumes the form sometimes of a bunch of grapes, sometimes of a dove. The ∇ is the constellation called by the Greeks Δελτωτόν, and by the Latins *Triangulum*, and the Γ represents the neighbouring group of the *Hyades*. In support of his theory that stars and constellations were not infrequently made use of as coin-types, Mr. Svoronos cites the coins of the island of Ceos, on which *Sirius* is seen in the form of the forepart of a dog surrounded by rays, and the *Pleiads* or βότρυς as a bunch of grapes accompanied invariably by a star.

In a future article Mr. Svoronos proposes to apply the star-type theory to many other coins on which dots or stars occur in combination with animals or natural objects which are capable of being explained as constellations. He believes that many archaic types may be thus accounted for. Mr. Svoronos's hypotheses are suggestive, but must not be pushed too far.

B. V. HEAD.

K. F. Kinch. *On the Language of the Sicilian Elymi.*

In this essay the author puts forward an intelligible theory with regard to the hitherto unexplained terminations **ΙΑ**, **ΙΕ**, **ΙΒ**, &c. on the coins of the towns Segesta and Eryx,

in Sicily. These two cities were, as is well known, inhabited by the Elymi, a mixed race of people, apparently distinct both from the Sicels and the Sicanians. They appear to have spoken a dialect allied to the Ionic, but in which the long e sound was represented by the letter **B**, a form which the Elymi probably borrowed in the sixth century from the neighbouring Megarian colony Selinus, for in the alphabet of Corinth and Megara, **E** is equivalent to *ei*, and **B** to *ε* and *η*. The Elymi, however, seem to have used **E** for *ε* and *ei*, and **B** for *η* only. At a later period the use of **B** for *η* was given up, and **E** used for all three sounds, *ε*, *ei*, and *η*. The coin-legends **ΞΕ<ΕΞΤΑΙΒ**, **ΞΕ<ΕΞΤΑΙΒΕΜΙ**, **ΞΕΛΕΞΤΑΙΑ** and **ΞΕΓΕΞΤΑΙΕ** are therefore equivalent to *Σεγισταλη*, *Σεγισταλη* *ειμί*, *Σεγισταλια*, and *Σεγισταλη*. The ethnic termination *αλιος* is peculiar, and is not found in any Greek dialect. It may be compared with the Phrygian *Σαβάλιος*, and with the Lycian *Sppartazi* and *Atunazi*=*Σπαρταῖος* and *Ἀθηναῖος*. The Greek form of **ΞΕ<ΕΞΤΑΙΒΕΜΙ** would therefore be *Σεγισταλή* *ειμί*, the meaning being, "I am the Segestan Heroine," or the eponymous nymph of the town. Thus the conjecture which has been suggested by some scholars that the termination **ΙΒ** is a Greek rendering of the Phœnician צי (Head, *Hist. Num.* p. 114) must be finally abandoned.

B. V. HEAD.

L. Brunn. *On Coins of Tyras in Sarmatia struck under Hadrian.*

The writer here gives a *résumé* of what is known of the numismatic history of Tyras, from which it appears that this Milesian colony, situate on the west coast of the Euxine near the mouth of the Dniester, struck but few autonomous coins. Under the Emperor Nero the territory of Tyras was added to the Roman Province of Mœsia inferior. No Imperial coins of Tyras are, however, known before the time of Domitian, and it has hitherto been thought, owing to the absence of any coins between Domitian and Antoninus Pius, that Tyras, during this interval, was again independent of Rome. This hypothesis is now proved to be without foundation by the discovery of two coins of the Emperor Hadrian. Hence it is probable that future discoveries will prove that the Roman dominion over Tyras was uninterrupted from the reign of Nero to that of Severus Alexander, when the coinage finally ceases.

B. V. HEAD.

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END OF VOL. IX.

PROCEEDINGS OF THE NUMISMATIC SOCIETY.

SESSION 1888—1889.

OCTOBER 18, 1888.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

Colonel Acton C. Havelock was elected a Member of the
Society.

The following presents were announced and laid upon the
table :—

1. Berliner Philologische Wochenschrift. Nos. 20—41.
From the Publishers.

2. Pandyan coins. By the Rev. J. E. Tracey. From the
Author.

3. Revue Belge de Numismatique. Parts III—IV, 1888.
From the Society.

4. Jahrbücher des Vereins von Alterthumsfreunden im
Rheinlande. Heft LXXXV. From the Society.

5. Rivista Italiana di Numismatica. Fasc. II—III, 1888.
From the Publishers.

6. Bulletin historique de la Société des Antiquaires de la
Morinie. 146^{me} livraison. From the Society.

7. Thornburn's Guide to the Coins of Great Britain and Ire-
land. 2nd edition. From the Publishers.

8. Numismatische Zeitschrift. July—December, 1886, and January—December, 1887. From the Society.

9. Annuaire de la Société Française de Numismatique et d'Archéologie. March—June, 1888. From the Society.

10. Monatsblatt der Numismatischen Gesellschaft in Wien. June—August, 1888. From the Society.

11. A Practicable Decimal System for Great Britain and her Colonies. By R. J. Rohde. From the Author.

12. Journal of the Royal Historical and Archæological Association of Ireland. No. 75. From the Association.

13. Zeitschrift für Numismatik. Bd. XVI. Part 192. From the Editor.

14. Aarbøger for Nordisk Oldkyndighed og Historie, Bd. III. Part 2. From the Society of Northern Antiquaries of Copenhagen.

15. Smithsonian Report, 1885. Part II. From the Institute.

16. The Journal of Hellenic Studies. Vol. ix. Part I. From the Hellenic Society.

17. Mémoires de la Société des Antiquaires de Picardie. Vol. xi, and Bulletin of the same. Part IV, 1887, and Part I—II., 1888. From the Society.

18. Bulletins de la Société d'Emulation d'Abbeville, 1886—7. From the Society.

19. Bulletin de la Société des Antiquaires de l'Ouest. Parts I—VIII, 1888. From the Society.

20. Journal of the Institute of Bankers. Vol. ix, Part VII. From the Institute.

21. Numismatique de l'Alsace. By A. Engel and E. Lehr. From the Authors.

22. Sitzungsberichte der K. Preussischen Akademie der Wissenschaften. Parts I—VII. From the Academy.

23. Katalog Sobraniya Drevnostei. By A. Oreshnikos. From the Author.

24. Proceedings of the Society of Antiquaries of London. Vol. xii, Part I. From the Society.

Mr. H. Montagu, V.P., exhibited a penny of William, son of Stephen (Ruding, "Suppl.," Part II, Plate II, No. 1), having on the obverse a bust of William facing between two five-pointed stars surrounded by the legend LVILLEM DVO, and on the reverse a lozenge-shaped compartment surmounted by a cross pommée and WILLEM ON CRST. Mr. Montagu stated that he was not at all satisfied with Ruding's attribution, and that he hoped on some future occasion to bring the coin again before the notice of the Society.

Mr. Evans suggested that the coin may have been struck at Christchurch, Hants.

Mr. Hall exhibited a gold coin of Cunobeline with an ear of corn dividing the letters CAM on the obverse, and on the reverse a horse, above which was a palm-branch terminating in an arrow-shaped ornament.

Mr. Webster exhibited a copper denarius of Carausius of large size; *rev.*, VICTORIA GERM., trophy between two seated captives; also five half-crowns of William III dated 1697, supposed to be forgeries of the time of Anne.

Mr. Pinches exhibited the Jubilee medal of the Society of Arts, executed by Mr. Gilbert, A.R.A.

Mr. Prevost exhibited a series of Swiss Tir medals or marksmen's prizes distributed at the annual rifle meetings 1842—85; they are marked with the values of four and five francs, and pass as current coins.

Mr. H. H. Howorth, M.P., communicated a paper on the eastern capital of the Seleucidæ, in which he argued that the Bactrian coins bearing the letters Δ, ΔΙ, &c., were struck in the city of Nysa in Khorasan, the eastern portion of the empire of the Seleucidæ, and that the name of that place had been changed by Antiochus I to Dionysopolis. In support of this conjecture Mr. Howorth cited several instances in which towns of that name had undergone the same change of nomenclature. See Vol. viii. p. 293.

Mr. Oman communicated a paper on an unpublished copper denarius of Carausius, having on the reverse a figure of Hercules

and the inscription HERC. DEVSENIENSI. The type is well known on coins of Postumus, but no previous mention seems to have been made of its occurrence on coins of Carausius. The Paper is printed in Vol. viii, p. 308.

NOVEMBER 15, 1888.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

Col. C. J. Wright, and Messrs. G. H. Humphries, L. A. D. Montague, and E. Thurston were elected Members of the Society.

The following presents were announced and laid upon the table:

1. Berliner Philologische Wochenschrift. Nos. 42—45. From the Publishers.

2. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 62—63. From the Society.

3. Journal of the Institute of Bankers. Vol. ix, Part VIII. From the Institute.

4. Proceedings of the Society of Antiquaries. Vol. xii. No. 2. From the Society.

5. Annuaire de la Société française de Numismatique. Sept.—Oct., 1888. From the Society.

6. Bulletin Historique de la Société des Antiquaires de la Morinie. 147^{me} livraison. From the Society.

Mr. Evans exhibited a bond for 30 piastres, inscribed in Arabic, "This amount will be paid at the Treasury of Khartoum or at Cairo six months after 25th April, 1884," and bearing the stamp or seal of the late General Gordon, with his signature.

Mr. Durlacher exhibited a gold crown of Elizabeth with the portecullis mint-mark.

Mr. H. Montagu read a paper on the half-noble of the third

coinage of Edward III, in his own collection, a coin of which no other specimen was known. See Vol. viii. p. 310.

Mr. A. J. Evans read the first portion of a paper on the coinage of Tarentum, in which he attempted to arrange the series of Tarentine didrachms presenting equestrian types in definite chronological periods. In undertaking this the author had used as the basis of his researches the materials supplied by several recent finds of Tarentine coins which had passed through his hands. The new standpoints thus acquired had enabled him, while dating a large number of types with greater precision, to discover, in the types and associated symbols, new historical allusions analogous to that supplied by the Pyrrhic elephant on one of the later coins. Several types were brought into relation with the Spartan alliance under King Archidamus, and in particular it was shown that a whole series of coins exhibiting in the field a seated eagle with folded wings were struck under the hegemony of the Molossian Alexander, and on that account bore the symbol of the Dodonæan Zeus. The author also advanced some new views regarding the signatures on the Tarentine coins. The abbreviated signatures of the earlier period were referred by him to the actual die engravers; those, on the other hand, which began to appear in a more or less full-length form towards the end of the fourth century were certainly the names of magistrates. Mr. Evans followed Mommsen in regarding the didrachm as the *νοῦμμος* (nummus) of Aristotle (ap. Pollux).

A short discussion followed, in the course of which Mr. B. V. Head said that on one point he was inclined to differ from Mr. Evans, and to look upon the "nummus" not as the didrachm, but as a small coin corresponding very closely with the Roman nummus or sestertius; in support of which theory (first started by Prof. Gardner), he cited the "Tabulæ Heracleenses," in which a fine of ten silver nummi for each plant is ordered to be paid by a tenant omitting to plant the full number of olive-trees specified in the contract by which he held his land. Mr. Head

said that such a fine would have been exorbitant if the nummus had been identical with the didrachm, whereas supposing it to have been the diobol it would not appear to be excessive.

DECEMBER 20, 1888.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

Thomas E. Tatton, Esq., was elected a Member of the Society.

The following presents were announced and laid upon the table:—

1. *Berliner Philologische Wochenschrift*, Nos. 46—50. From the Publishers.
 2. *Jahrbücher des Vereins von Alterthumsfreunden im Rheinlande*. Heft 86. From the Society.
 3. *Madras Central Museum Catalogue*. No. 2. By E. Thurston. From the Author.
 4. *Bulletin de la Société des Antiquaires de Picardie*. No. 3, 1888. From the Society.
 5. *Journal of the Institute of Bankers*. From the Institute.
 6. *Numismata Imperatorum Augustorum et Cæsarum a populo Romanæ ditionis Græce loquentibus*. By J. Vaillant, 1698. From the Librarian, Dr. O. Codrington.
 7. *Numismatique des Scythes et des Sarmates*. By P. Vacquier, 1881. From the President.
 8. *Recueil de médailles de peuples et de villes*. By M. Pellerin. 3 vols. 1763. From the President.
- Mr. H. Montagu exhibited specimens of the Hog-money of the Bermudas, consisting of the shilling, sixpence, and twopence.
- Mr. Deakin exhibited a set of the silver and copper coins struck by Belgium for the Congo district.

The Rev. G. F. Crowther read some notes on the coins of the second issue of Henry VII, in which he proposed a chronological classification of the groats according to style and mint-marks. Mr. Crowther's paper was illustrated by a tray of select specimens and is printed in Vol. ix, p. 357.

Mr. Evans read a paper on the names by which the various coins current in England in the sixteenth and seventeenth centuries were commonly known. The names in question were furnished by the Middlesex Session Rolls, consisting chiefly of records of bills of indictment, &c., of the reigns of Edward VI, Mary, Elizabeth, and James I. Among other curious entries it appeared that the gold pieces of ten shillings were sometimes described as "sovereigns," sometimes as "half sovereigns." In the reign of James I, mention was made of an Elizabeth "double sovereign" worth twenty shillings, an entry which confirmed the evidence of the ten-shilling pieces having been frequently called sovereigns. See Vol. ix, p. 323.

Mr. B. V. Head read a paper on the coins of the towns of Germanicopolis and Philadelphia in Cilicia Tracheia. See Vol. viii, p. 300.

JANUARY 17, 1889.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

The following presents were announced and laid upon the table:—

1. Monatsblatt der Numismatischen Gesellschaft in Wien. Nos. 64—65. From the Society.

2. Aarbøger for Nordisk Oldkyndighed og Historie. Bd. III, Heft III, 1888. From the Royal Society of Northern Antiquaries of Copenhagen.

3. Berliner Philologische Wochenschrift. Nos. 51—52, 1888, and 1—2, 1889. From the Publishers.

4. Nouvelle Collection des Monnaies orientales du Général Komaroff. By W. Tiesenhausen. From the Author.

5. Hints to Coin Collectors in Southern India. Part II. By Capt. R. H. C. Tufnell. From the Author.

6. Revue Belge de Numismatique. 1^{re} livraison, 1889. From the Society.

7. Bulletin Historique de la Société des Antiquaires de la Morinie. 148^{me} livraison. From the Society.

8. Journal of the Institute of Bankers. Vol. x, Part I. From the Institute.

The Rev. G. F. Crowther exhibited a series of pennies, half-pennies, and farthings of Henry VI.

Mr. L. A. Lawrence exhibited an Oxford penny of Charles I, of the Declaration type, 1644, and a farthing of Edward IV.

Mr. Montagu read a paper on the gold coins of James I, with new and unpublished mint-marks, supplementary to a previous paper on the same subject. The total number of new mint-marks noticed by Mr. Montagu amounted to as many as forty. See Vol. ix, p. 365.

Mr. A. E. Packe communicated a paper on the *lis* mint-mark on gold coins of Henry VI's restoration, October, 1470—April 1871, in which he gave it as his opinion that the coins with the *lis* preceded in point of time the issue with the cross mint-mark, which he proposed to limit to the last month of Henry's reign, the indenture with Sir Richard Tunstall, Master of the Mint, bearing date March 7th, 1470—1. Mr. Packe also threw out the suggestion that the *lis* coins were struck at the York mint. The paper is printed in Vol. ix, p. 353.

FEBRUARY 21, 1889.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

Percy Gordon Cotton, Esq., was elected a Member of the Society.

Mr. J. W. Trist, F.S.A., presented to the Society a number of old forgeries of Greek coins, chiefly of Italy and Sicily, from the Frere collection.

The following presents were announced and laid upon the table :—

1. Forenigen til Norske Fortidsmindesmerkers-bevaring, 1887. From the Norwegian Antiquarian Society.

2. Kunst og Haandverk fra Norges Fortid. Pl. LII—LXI, 1888. From the same.

3. Berliner Philologische Wochenschrift. Nos. 3—7. From the Publishers.

4. Rivista Italiana di Numismatica. Fasc. IV, 1888. From the Publishers.

5. Monatsblatt der Numismatischen Gesellschaft in Wien. Nos. 66, 67. From the Society.

6. Journal of the Institute of Bankers. Vol. x, Part II. From the Institute.

7. Mémoires de la Société des Antiquaires de l'Ouest. Tom. x, 1887. From the Society.

8. Ancient Dorset. By Charles Warne, F.S.A. From C. H. Warne, Esq.

Mr. L. A. Lawrence exhibited two pennies of Edward IV, from the same die, struck at Durham, with the letters E in the inscription reversed, and another with the mint-mark a pierced cross and pellet; also a penny of the last coinage of Henry VII struck at York, with the extremities of the cross on the reverse *pattées*.

Mr. Montagu exhibited two pennies of Ecgberht, King of Kent, A.D. 765—791, bearing the moneyers' names BABBA and VDD. These coins were formerly attributed to Ecgferth, son of Offa, who reigned for six months in Mercia after his father's death. Mr. Montagu also exhibited a wooden draughtsman from metal dies by the artist Martin Brunner; *obv.* palm tree, &c., REX GVILIELMVS IVSTVS SIC FLOREBIT RECVPERATOR ET TRIVMPHATOR MAXIMVS; *rev.* Fortune with rope round her body, pulled on the one side by James II, and on the other by Father Petre (?); *inscr.* AH FORTVNA BONA! ME CONDONA. Mr. Montagu believed this to refer to the pacification of Ireland in 1690. See Vol. ix, p. 322.

Mr. Hoblyn exhibited a fourpenny piece struck in 1888 for the colony of British Guiana, and three coins, presumably of Charles I and Johanna, and of Philip II, struck for the Spanish colonies of Cuba and Porto Rico.

Mr. Webster exhibited a set of new patterns of the silver coinage of Japan, and Mr. Durlacher a five-guinea piece of George I, with the rare date 1720.

Mr. W. H. D. Longstaffe communicated two papers: (1) on the Reading penny which he attributed to the reign of Edward III, and (2) on a curious groat in the British Museum, presenting the name of Richard and the bust of a king wearing an arched crown, which the writer thought could not have been struck during the reign of Richard III, as the arched crown was not introduced until Henry VII's time. He therefore believed the piece to have been struck for Perkin Warbeck under his assumed name of Richard IV. These papers are printed in Vol. ix, pp. 348 and 363.

Mr. B. V. Head exhibited casts of this coin and of a groat of Henry VII for comparison, taken from specimens in the British Museum.

A discussion followed, in which the President, Mr. Montagu, and Mr. Grueber agreed that the coin was a forgery of the time.

of Henry VII, and that the name of Richard was placed upon it because the forger did not venture to counterfeit the money of the reigning monarch. The weight of the coin is about eleven grains below that of the genuine groats of the time.

MARCH 21, 1889.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

Major-General Valentine F. Story and William Rome, Esq.,
F.S.A., were elected Members of the Society.

The following presents were announced and laid upon the
table:—

1. *Berliner Philologische Wochenschrift*. Nos. 8—11. From
the Publishers.

2. *The Journal of the Institute of Bankers*. Vol. x, Part III.
From the Institute.

3. *The Journal of Hellenic Studies*. Vol. ix, No. 2. From
the Society.

4. *The Numismatist*. No. 1. From the Publishers.

5. *Annuaire de la Société Française de Numismatique*. Jan-
uary—February, 1889. From the Society.

6. *A Dictionary of Roman Coins*. By S. W. Stevenson,
C. R. Smith, and F. W. Madden. From the Publishers.

7. *The Coinage of the Early Imperial Gupta Dynasty of
Northern India*. By Vincent A. Smith. From the Author.

8. *Ibn Batutah in Southern India*. By Mrs. L. Fletcher.
From Captain Tuffnell.

9. *The City of London Jubilee Medal*. From the Corpora-
tion of the City.

The President exhibited a set of remarkably fine gold coins
of Nerva, Trajan, Plotina, Matidia, Marciana, Hadrian, Sabina,
and Ælius Cæsar.

Mr. Hall exhibited two coins of Licinius and one of Constantine the Great, bearing unusual portraits, resembling that of Diocletian.

Mr. Montagu exhibited a series of coin-weights, chiefly for the gold coins of James I, representing every gold denomination of that reign, some of them bearing the initials of Briot.

Mr. A. Prevost exhibited a specimen of the five-franc piece issued last year in Switzerland, and promptly withdrawn from circulation because its appearance was not considered satisfactory by the public.

Dr. O. Codrington exhibited a silver coin of Uljaitu, Mongul ruler of Persia A.D. 1304—1316.

Mr. G. M. Arnold communicated a paper on the Roman station of Vagniacæ, together with a short account, by Mr. C. R. Smith, of Roman coins discovered during the last half century in the fields adjoining Springhead. See Vol. ix, p. 329.

Mr. B. V. Head read a paper on Athenian and other coins. Printed in Vol. ix, p. 229.

APRIL 18, 1889.

H. MONTAGU, Esq., F.S.A., Vice-President, in the Chair.

Frederick William Yeates, Esq., was elected a Member of the Society.

The following presents were announced and laid upon the table:—

1. Monatsblatt der Numismatischen Gesellschaft in Wien. Nos. 68 and 69. From the Society.

2. Berliner Philologische Wochenschrift. Nos. 12—15. From the Publishers.

3. Aarbøger for Nordisk Oldkyndighed og Historie. 1888, Part IV, and 1889, Part I. From the Royal Society of Northern Antiquaries, Copenhagen.

4. *Journal of the Royal Historical and Archæological Association of Ireland.* No. 77. From the Association.

5. *Proceedings of the Society of Antiquaries of Scotland,* 1887—8. From the Society.

6. *Journal of the Institute of Bankers.* Vol. x, Part IV. From the Institute.

7. *Revue Belge de Numismatique.* 2^{me} livraison, 1889. From the Society.

8. *Rivista Italiana Numismatica.* Anno 2. Fasc. I, 1889. From the Editors.

9. *The Rev. Churchill Babington, D.D.* By C. C. Babington. From the Author.

10. *Catalogue of the Coins of Corinth and Colonies, &c., in the British Museum.* By Barclay V. Head, D.C.L. From the Trustees of the British Museum.

11. *Études Archéologiques et Numismatiques,* par J. Svoronos. Paris, 1889. From the Author.

12. *Tier- und Pflanzenbilder auf griechischen Münzen und Gemmen des Klassischen Altertums.* Von Imhoof-Blumer und Otto Keller. From the Authors.

13. *Trübner's Record.* Vol. i, Part I. 1889. From the Publishers.

14. *Répertoire des Sources Imprimées de la Numismatique Française.* Par A. Engel et R. Serrure. Tom. ii. 1889. From the Authors.

15. *Collecção Numismatica Brazilica—Medalhas Brasileiras.* From the Vicomtesse de Cavalcanti.

The Rev. G. F. Crowther exhibited five coins of Ethelwulf of different types, one with the cross moline.

Mr. L. A. Lawrence exhibited a half-groat of Henry IV having the king's head, like that of Richard II, in a tressure of nine arches, all fleury except that on the breast: on the king's breast is a slipped trefoil, and there are pellets at the sides of the crown; also a halfpenny of Edward IV, struck at York, with CIVITAS EBO on the reverse.

Mr. Montagu exhibited a remarkably fine series of the gold coins of Edward VI, including a pattern double sovereign of the highest rarity, the only other specimen known being in the British Museum.

Mr. B. V. Head contributed two papers on Greek imperial coins struck at Ephesus in the reigns of Trajan and Antoninus Pius, one of which bore the remarkable inscription, Ο ΝΕΩ [κόρος] ΕΦΕ[σίων] ΔΗ[μὸς] ΕΠΙΕΧΑΡ[αξέ], coupled with the type of the captive Parthia seated at the foot of a trophy of arms; the meaning of the inscription being that the people of Ephesus engraved upon this coin a group of a trophy and captive in commemoration of Trajan's conquest of Parthia. Mr. Head stated that this coin afforded the only instance in Greek numismatics of the employment of the verb ἐπιχαράσσειν as applied to coin-types, though the word occurs in this connection in Plutarch (*Poplic.*, ii). See Vol. ix, p. 235.

MAY 16, 1889.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

The following presents were announced and laid upon the table:—

1. Numismatische Zeitschrift. Jan.—Dec., 1888. From the Society.
2. Berliner Philologische Wochenschrift. Nos. 16—19. From the Publishers.
3. Monatsblatt der Numismatischen Gesellschaft in Wien. No. 57. From the Society.
4. The Numismatist. No. 2. From the Publishers.
5. Journal of the Institute of Bankers. Vol. x, 5. From the Institute.

6. *Annuaire de la Société Française de Numismatique*. March—April, 1889. From the Society.

7. *Sitzungsberichte der Königlich-Preussischen Akademie der Wissenschaften zu Berlin*. Parts XXXVIII—LII. From the Academy.

8. *Kongl. Vitterhets Historie och Antiquitets Academiens Monadsblad*. 1887. Part XVI. From the Academy.

Mr. W. Ransom exhibited a copper coin of Cunobeline with reverse type, a standing armed figure and the inscription TAS-CIOVANTIS; it was found at Arlsey, Beds.

Mr. Evans exhibited electrotypes of four Roman gold bars found at Kraszna, on the Bodza pass, near Czofalva, in Transylvania, in September, 1877, stamped with the heads of the Emperors Valentinian I, Valens, and Gratian, and with the names of Lucianus, Flavius Flavianus, Quirillus, and Dionisus, probably masters of the mint of Sirmium, the initials of which place also occur on the bars. The dates of these bars lie between A.D. 367—375.

Mr. W. S. Churchill exhibited a *folles* of Byzantine type bearing figures of Heraclius, Heraclius Constantine, and Heracleonas, but struck by a Saracen Khalif at Tiberias, in Syria, *circa* A.D. 641, and bearing the name of that city in Greek and Arabic characters.

Mr. H. Montagu read a paper on the mint of Castle Rising in Norfolk, to which place he attributed a penny of Stephen with the reverse legend HIVN ON RISINGE. In the course of his remarks the writer threw some doubt on the attribution of other coins supposed by some numismatists to have been issued at that place. The paper will be found in Vol. ix. p. 335.

Mr. F. Latchmore communicated a paper on a recent find of Roman base denarii made early in the present year near Cambridge. The hoard consisted in all of about 2,500 pieces, some having been disposed of before it came into Mr. Latchmore's hands, and extended from the reign of Gordian III to that of Aurelian. The greater number were of the reigns of

Postumus, Gallienus, Victorinus, Tetricus I and II, and Claudius Gothicus. Of Aurelian there were only three coins, which therefore fixed the date of the burial of the hoard to A.D. 273. See Vol. ix, p. 382.

Mr. T. Ready read a paper on a hoard of ninety-nine Roman silver "siliquæ" found at Sproxton, in Leicestershire, in 1811, struck between the reigns of Constantius II and Arcadius, thus covering a period from about A.D. 357 to 395, at which latter date the hoard was probably buried.

JUNE 20, 1889.

ANNIVERSARY MEETING.

JOHN EVANS, Esq., D.C.L., LL.D., F.R.S., P.S.A., President,
in the Chair.

The Minutes of the last Anniversary Meeting were read and confirmed.

The Report of the Council was then read to the meeting as follows:—

GENTLEMEN,—The Council again have the honour to lay before you their Annual Report as to the state of the Numismatic Society.

With great regret they have to announce their loss by death of the following five Ordinary Members:—

The Rev. Churchill Babington, B.D.

C. J. Leather, Esq.

Dr. L. Loewe.

John Toplis, Esq.

T. W. U. Robinson, Esq., F.S.A.

And of one Honorary Member:—

M. Renier Chalon.

Also by resignation of two Ordinary Members :

M. Gaston L. Feuadent. | W. Burton Harris, Esq.

On the other hand the Council have much pleasure in recording the election of ten new Members :—

Percy Gordon Cotton, Esq.	Major-Gen. Valentine F. Story.
Colonel Acton C. Havelock.	Thomas E. Tatton, Esq.
G. H. Humphries, Esq.	E. Thurston, Esq.
L. A. D. Montague, Esq.	Colonel C. J. Wright.
W. Rome, Esq.	F. W. Yeates, Esq.

According to our Secretary's Report our numbers are, therefore, as follows :—

	Ordinary.	Honorary.	Total
June, 1888	247	34	281
Since elected	10	—	10
	257	34	291
Deceased	5	1	6
Resigned	2	—	2
Erased	—	—	—
June, 1889	250	33	283

The Council have further the honour to announce that they have unanimously awarded the Medal of the Society in silver to Professor Percy Gardner, Litt.D., F.S.A., for his distinguished services to the Science of Numismatics as exemplified by his numerous works and articles on Greek coins.

The Treasurer's Report is as follows :—

Statement of Receipts and Disbursements of the Numismatic Society, from June, 1888, to June, 1889.

Dr. THE NUMISMATIC SOCIETY IN ACCOUNT WITH ALFRED EVELYN COPP, HON. TREASURER. Cr.

	£	s.	d.		£	s.	d.
To Messrs. Virtue & Co., for printing Chronicles, Part I. of 1888	40	4	9	By Balance from last Statement.			128 18 7
" ditto ditto Part II. of 1888	36	6	9	" Entrance Fees			9 9 0
" ditto ditto Part III. of 1888	50	18	0	" Annual Subscriptions			227 17 0
" ditto ditto Part IV. of 1888	54	6	6	" Received for Chronicles:—			
" The Autotype Company	13	18	9	Mr. Bernard Quaritch	50	11	4
" The Royal Asiatic Society, 1 year's rent due } June, 1889 }	20	0	0	The Rev. Charles Soames	0	3	6
" Mrs. Parkinson, for Tea, Coffee, &c., to Christ- mas, 1888 }	3	15	6	Colonel J. Tobin Bush for Foreign Postage	50	14	10
" ditto for Attendance to ditto	6	6	0	" Three months' Dividend on £700 New Consols,	0	2	0
" Mr. Bernard Quaritch, for Books	1	16	0	due 5th July, 1888 (less Property Tax)	5	2	5
" Mr. T. Anderson, for Drawing	1	1	0	ditto ditto 5th October, 1888	5	2	5
" Messrs. Walker & Bowtell, for Engraving	4	5	0	ditto ditto 5th January, 1889	5	2	5
" Messrs. Anderson & Son for Engraving	10	6	0	ditto ditto 5th April, 1889	5	2	5
" Mr. R. O. Hearson, for Printing, &c.	1	16	6				
" Messrs. H. Bowyer & Co., for Bookbinding	1	18	3				
" Fire Insurance	0	15	0				
" Secretaries, for Postages	3	10	0				
" Treasurer, for Postages, Receipts, Stationery, &c.	5	0	0				
" Collector, for Commission and Postages	7	15	0				
" Balance	173	12	1				
	£437	11	1				
				Balance brought down			£173 12 1
				ALFRED E. COPP,			
				HONORARY TREASURER.			

At the conclusion of the reading of the Report of the Council, the President addressed Professor Gardner as follows :—

Professor Gardner,—I am much gratified that the duty has fallen upon me of handing to you the medal of the Numismatic Society, which has been unanimously awarded to you by the Council in recognition of your labours, especially in the field of Greek numismatics.

It is now eighteen years since you first embraced archæology as your principal object of practical study, by entering as an assistant among those in charge of our great National collection. In that same year, 1871, you became a member of this Society, and commenced that long series of Papers which have added so much value to the pages of the *Numismatic Chronicle*, and with which all our members are familiar.

In your official capacity at the British Museum, besides assisting in the preparation of other catalogues, you compiled those of the coins of the Seleucid Kings of Syria and of the Peloponnesus, Thessaly and Bactria. I need hardly say that these volumes are standard works of reference in their particular subjects, but I may call attention to the Introductory Chapters in each case which give such a thorough insight into the character of the coinage discussed in the subsequent portion of each volume.

These, however, may in some degree be regarded as the result of official work ; but not so your remarkable and handsome volume on the types of Greek coins, which embodies the essence of some lectures delivered while you held the Disney Professorship of Archæology in the University of Cambridge, and which so completely demonstrates your wide and accurate acquaintance with all the varied details of Greek archæology and art. Your essay on the Parthian coinage in the *Numismata Orientalia* is also of great value and much in advance of previous publications on the subject.

In presenting our medal last year to M. Imhoof-Blumer, I

had occasion to mention your co-operation with him in the production of the Numismatic Commentary on Pausanias, which so strikingly exhibits the light which coins, when properly treated, are capable of throwing on history.

Your present career as Professor of Archæology in the ancient University of Oxford, is one which will give you great scope in extending the use of Numismatics in this most important direction, and I trust that this Society may constantly receive recruits from among those whose studies and tastes you may assist in guiding. The medal of our Society has up to the present time been for the most part awarded to those who after long numismatic labours, were entitled to repose upon their laurels, but I hand it to you not only in recognition of work done and as a token of regard from your fellow-workers, but also as some incentive to continue your labours in that field which you so well know how to cultivate.

In reply Professor Gardner said,—

Mr. President and Gentlemen, you have this evening conferred on me a great, I may add an unexpected, honour. There are some who value academic distinctions in proportion to the distance from which they come, who think much more of an honour offered by Berlin or St. Petersburg than of one conferred by Englishmen. Yet if there be any truth in the proverb in regard to the prophet and his own country, home rewards have a value and a meaning of their own. That is my feeling to-night. Your medal, hitherto conferred only on a very few of the most distinguished numismatists of all countries, has been by all of them regarded as a high distinction, and you could not have conferred it upon any one who would not have felt gratified by your selection. To me it is a source of the utmost satisfaction to find that the able numismatists who have been joined with me on the Council of this Society, and who have an intimate knowledge of my work, have chosen me to be the recipient of this year's medal. I know that their opinion of

my services to numismatics, so ably set forth by our President, is, however generously expressed, an opinion honestly formed, and it fills me with encouragement and satisfaction. I have laboured for sixteen years, according to my ability, in the field of Greek numismatics; and to-day the labours of these sixteen years meet with the most satisfactory recognition, and receive the stamp of an approbation which I may venture to regard as final.

During the last two years my chief duties as Professor of Classical Archæology at Oxford, have been mainly outside the limits of numismatics; and the experience of these years has not diminished, but fully confirmed, my conviction of the value of numismatic study. In lectures delivered at Cambridge six years ago I maintained that numismatics is the grammar of archæology, and my opinion is still unchanged. There is no archæological training so sound as that of the numismatist; nor is any part of archæology so important to history in respect alike to results and methods.

In one respect, and in one respect only, a tinge of regret mingles with the satisfaction with which I receive your medal. Such distinctions are usually conferred rather in recognition of past services than in the expectation of fresh contributions to science. They more often mark the close than the middle of a career. So, in spite of our President's disclaimer, I am half inclined to think that your Council have conferred their medal on me as a parting gift, despairing of finding me of use in the future. If I looked on to-day's award as the close of my numismatic career, it would give me by no means unmixed satisfaction. For I still hope, whenever a time of leisure comes hereafter, to take up some of those many tasks on the borders between archæology and numismatics which are now urgently claiming attention. It is my hope that this Society has by no means yet seen the last of me.

Nineteen annual volumes of your journal are now on my shelves; and in these nineteen years my connection with the

Numismatic Society has been a constant source of satisfaction. I would venture to take this opportunity of expressing to friends and colleagues, present and absent, my warm recognition of their unvarying kindness, and in particular to thank you, Mr. President, for the generous words of your address—words which come from you with the highest authority, and which give me a pleasure which I shall not attempt further to express.

The President then delivered the following address:—

Gentlemen,—The period has again come round when, according to custom, it becomes my duty to offer you some remarks on the condition and prospects of our Society, and the work that it has been able to accomplish during the twelve months that have elapsed since my last Anniversary Address.

With regard to the state of the Society you have heard from the Report of the Council that while we have lost but 7 of our members by death and resignation, 10 new members have been elected into the Society, so that our list of ordinary members now amounts to 250. Our finances are also in a satisfactory condition, as our Treasurer has about £45 more in hand than at the corresponding time last year. Twenty years ago, in 1869, our number was 130; and ten years ago, 192; so that our rate of increase has been fairly constant, and we may justly congratulate ourselves upon our prosperity, at all events so far as numbers are concerned. Before passing to a consideration of what work the Society has been doing, I must pay some tribute of respect to those whom we have lost from among us, and who now rest from their labours.

Dr. L. Loewe was one of the oldest members of our Society, having been elected on Feb. 27, 1845. Of Jewish origin, he took a warm interest in Oriental antiquities, and from time to

time gave us notices of such remarkable coins and medals as came under his observation. The first of his essays that appeared in the *Numismatic Chronicle*, was on a Mamluk coin of Bibárs,¹ a sultan who took part in the wars of the Crusaders in the days of our Edward I. This paper was soon followed by a Memoir on the Lemlein Medal, which was read before the Society on June 25, 1857.² This medal, to which attention was first called by Menestrier, in 1696, has been the subject of much discussion, which Dr. Loewe carefully recapitulated, and then gave his own view of the still rather enigmatical inscriptions on the medal. For many years we have had no further communication from Dr. Loewe, but at the Anglo-Jewish Exhibition of 1877 he was a member of the General Committee, and sent some Jewish coins for exhibition. His decease took place on the 5th of November last.

The Rev. Churchill Babington, B.D., was also among our oldest members, having been elected in March, 1857. He was the only son of the Rev. Matthew Drake Babington, Rector of Thringstone, Leicestershire, and was born on March 11, 1821. At an early age he exhibited a marked taste for natural history, and more especially for botany and ornithology. One of his first literary efforts was the contribution to Potter's *History of Charmwood Forest* of the section on birds, and, in connection with the Rev. A. Bloxam, of that on botany. This work was published in 1842. In 1839 he had entered St. John's College, Cambridge, and in 1843 graduated as B.A., taking a place in the first class in the classical tripos, and that of a senior optime in the mathematical. He soon became a Fellow of his college, and remained at Cambridge until 1867, taking an active part in university and college work. In 1850 he edited the recently-discovered papyrus fragments of the *Orations of Hyperides*, to which additions were made in 1853 and 1858. Besides other work, he also edited for the Rolls Series, *Pecock's*

¹ *Num. Chron.*, vol. xix. p. 71.

² *Ibid.*, vol. xix. p. 237.

Repression of Overmuch Blaming of the Clergy, and two volumes of *Higden's Polychronicon*. In 1865 he was elected Disney Professor of Archæology, a post which he held for fifteen years. During this period he devoted much attention to the study of Christian antiquities, and his contributions to Smith's Dictionary on that subject are numerous and important. His botanical and ornithological studies were also actively continued, and he contributed numerous papers on these subjects to various periodicals, the avifauna and flora of Suffolk being his principal fields of study. In 1866 he was presented to the living of Cockfield, near Bury St. Edmunds, which he held, beloved and respected, until his death, after a short illness, on the 12th of January last. We are here more specially interested in his numismatic work, of which many of the results are to be found in the pages of the *Numismatic Chronicle*.

His first communication to the Society was in 1861, on some unpublished Jewish coins, which was shortly followed by a notice of an unedited coin of Pessinus. In following years he continued to devote his attention to the Greek coinage, and communicated papers on coins of Berbis in Pannonia, Colossæ, and Laodicea, in Phrygia, as well as on some tetradrachms of Alexander the Great and Lysimachus. In 1873 he gave us a short account of some pennies of Henry I. found near Battle; and in the following year some interesting notes on coins of the Romans relating to Britain. These were succeeded by an account of some Roman silver coins, found at Lavenham, Suffolk, which was the last paper that the Society received from him. Of Dr. Babington's independent numismatic works, his catalogue of British and English coins in the Fitzwilliam Museum, and that of a selection from Col. Leake's Greek coins must be mentioned. He also catalogued the classical portion of the MSS. in the University Library at Cambridge. He was a man of varied tastes, and of multifarious knowledge, and his influence in the promotion of the study of archæology and numismatics, as well as of different branches of natural history,

was very great at Cambridge and in the eastern counties. He belonged to a type of student of whom but few are left. May more arise to follow his example!

Mr. John Toplis, of Nottingham, was another enthusiastic collector of coins whose loss we this year have to lament. He was for many years connected with the Corporation of Nottingham, holding the post of chief clerk in the Estates department. He was an avid collector of everything connected with the history of his native county, having a good and extensive library replete with books of local interest, and a large and unrivalled collection of Nottinghamshire tokens, which he has bequeathed to the Museum in Nottingham Castle, in the formation of which he took great interest.

His communications to this Society principally related to local discoveries, and his account of coins of Stephen and others found at Nottingham in 1880 brought into greater prominence the remarkable coins struck from the defaced dies of Stephen, to which attention had been previously called by Archdeacon Pownall in 1862. A coin of Matilda and of "Wereric" were present in the hoard. An account of coins of Henry III found at Newark in 1881 was also given us by Mr. Toplis, and was especially interesting on account of the earthenware vessel in which they were deposited having been preserved. Another of his papers in 1884 contained a list of thirty-eight unpublished Nottinghamshire seventeenth-century tokens.

Mr. Toplis was a highly popular man among his townsmen, an active freemason, and for many years a sergeant in the Robin Hood rifles. His death took place in January last at the comparatively early age of forty-nine. He had been a member of this Society since 1880.

Mr. Thomas William Usherwood Robinson was elected a member of this Society in 1864; and was personally well known to many of us. Though he never, so far as I am aware, communicated any paper to our Proceedings, he was a most diligent antiquary and collector, and besides archæological and literary

treasures, he possessed a fine collection of English coins principally struck in northern mints. For some years he suffered from failing health, but still took a warm interest in all antiquarian pursuits. A liberal and kindly man, his death in August last, at the age of sixty-two, was much felt by a large circle of friends.

Among our foreign members there is only one loss to record—that of the veteran Renier Chalon, one of the founders of the Royal Numismatic Society of Belgium, and its President from 1845 to 1885, when he became the honorary president of that Society. Born at the end of 1802 he had well entered his eighty-seventh year at the time of his decease on the 27th of February last. He was for very many years the life and soul of the Belgian Numismatic Society, and for an almost equally lengthened period the principal editor of their Review. It is needless here to recall his numerous contributions to that periodical, but his *Recherches sur les Monnaies des Comtes de Hainaut* and his *Recherches sur les Monnaies des Comtes de Namur* are text books on their respective subjects. Our own Society received a few communications from him. In the fourteenth volume of the *Numismatic Chronicle* is a letter from M. Chalon regarding a sterling of the type of our Henry III, which at that time he attributed to Blumberg in Alsace, but which subsequently proved to be of Blomberg in Lippe, in the Duchy of Westphalia. Another letter from him in 1856 related to a counterfeit sterling also struck in imitation of the pennies of Henry III. As President of the Belgian Numismatic Society he was much esteemed and beloved, and though for some years his occupation of the post was only honorary his loss will be deeply felt. I must, however, now turn to the more cheerful task of passing in review some of the more important memoirs which have during the past year been brought under our notice either at our meetings or in the pages of the *Numismatic Chronicle*.

Foremost among these, both for magnitude and importance, I must place the essay written by my son, Mr. Arthur John

Evans, upon the "Horsemen" of Tarentum. In this paper, which occupies the lion's share of the *Chronicle* for the current year, he has attempted a chronological arrangement of the coins of Tarentum in correlation with what we know from written sources of the history of that ancient Spartan Colony. The coins of archaic character, and those which immediately follow with the type of the seated Démos, are not dealt with at any great length; but the subsequent period, during which the long array of Tarentine horsemen issued from the mint, extending from about B.C. 450 until the Hannibalic occupation, about B.C. 209, is subdivided into ten longer or shorter divisions, to each of which a portion of the coinage is assigned.

During the first six of these divisions the full-weight standard of 123—120 grains is thought to have prevailed, but after B.C. 281, the reduced standard of 102—98 grains is said to have been in use. There appears to be good reason for supposing that this modification of the standard took place at the time of the war of Pyrrhus, whose symbols of the elephant and of Pallas Promachos appear on some of the transitional coins. It would extend this address beyond all ordinary limits were I to attempt to discuss all the various points raised in this paper with regard to each of the nine periods that I have mentioned. The question of the proper meaning of the term "nummos," employed by Aristotle with regard to a Tarentine coin; the connection of the philosophical mathematician, Archytas, with the coinage of the town; the meaning of the types of the horsemen and of Taras and the dolphin; the relation of the coinage of Tarentum to that of Herakleia; the intervention of the Spartan king, Archidamos, and of Alexander the Molossian in Tarentine affairs, and the traces of the Pyrrhic Hegemony and of the Roman alliance that are to be found upon the coinage, all afford topics of interest into which I cannot now enter. A dissertation on the Artists', Engravers', and Magistrates' signatures upon the coins is of great value, and further evidence is added by the author, to that already existing, of artists of renown having

executed dies for various cities instead of confining their labours to the limited sphere of a single mint.

Valuable and exhaustive as this monograph upon the coins of Tarentum must on all hands be allowed to be, its importance is materially increased by the fact that the author has on several occasions made visits to the spot where the coins were once in circulation, and has had the opportunity of examining several important finds—one of them comprising upwards of 1,500 coins. His own cabinet is, moreover, especially rich in the coins of this town. I know that the Society will excuse me for having dwelt at some length upon this laborious essay, in which I naturally take some not unpardonable pride.

We have in addition received some other communications relating to Greek numismatics. One of them by Mr. H. H. Howorth, M.P., offers some curious speculations as to the Eastern capital of the Seleucidæ. It has been observed that the letters Δ or ΔI occur on almost all the coins of the Oxus find, and Prof. Gardner has suggested that they indicate the mint of Dionysopolis or Nysa, which has been identified by Sir A. Cunningham with the modern Begram, near Cabul. Mr. Howorth, however, while admitting the probability of Nysa or Nissa being also known under the name Dionysopolis, would place the Seleucid capital at a spot still retaining the old name of Nissa, and overlooking the Kara Kum desert, but which was once the capital of Parthiene or Parthia.

Dr. B. V. Head has favoured us with several notices with respect to the autonomous and Imperial Greek coinage. In one of these he has treated of the letter **N** which occurs on the amphora of some of the Athenian didrachms, and has shown that the view of M. Théodore Reinach of the numeral **N** standing for a 13th Prytany at Athens can hardly be accepted. The thirteen Prytanies seem to have existed during the period from B.C. 255 to *circa* 200, only, whereas the majority of the coins with the **N** date between B.C. 186 and 87; some other explanation of the occurrence of this mark must therefore be sought,

and in many cases, at all events, the **N** would seem to be merely an imperfect **M**.

Dr. Head has also corrected the reading given by Sestini of a coin of Ephesus, on which, however, the word *ἐχάραξε* or rather *ἐπεχάραξε*, as significant of engraving or striking the coin, is still admitted to occur. Another of his rectifications is the substitution of the word **IKECIOC** for **EMBACIOC** as an epithet of Apollo, on a coin of Antoninus struck at Ephesus. As a supplement to these corrections of others, Dr. Head removes the coin of Caligula, which he described last year as of Germanicopolis and Philadelphia in Cilicia, to Philadelphia in Lydia.

Sir Alexander Cunningham has given us the first instalment of an important memoir on the coins of the Indo-Scythians, dealing in the first place with some phases of the Arian alphabet, and with the monograms, so difficult of interpretation, that occur upon the coins. He has next touched upon the monetary standard, and the influence of Roman commerce upon the country, and then entered upon the historical notices of the Indo-Scythians who occupied the territories now known as Bactriana, Ariana, the Panjâb, and Sindh. These were successively occupied by the Sakas or Sacæ, the Kushans, the Kidaritæ or later Kushans, and lastly, in the fifth century of our own era, by the Ephthalites or White Huns. Of all these Scythian races some record is preserved in Chinese history, though a little light is also thrown upon them by Western writers. At some future time we may hope to receive a continuation of this paper, with a descriptive list of the Indo-Scythian coins at present known, and notes upon the principal points of interest that they present.

In the province of Roman numismatics a fair number of papers have been before us during the past year.

Mr. Oman has called our attention to a new type of Carausius, with Hercules and the legend **HERC. DEVSENIENSI** on the reverse. So little is known with regard to the locality of Deuso,

or of the peculiar cult of Hercules at that place, that I am doubtful whether the type can be considered as in any way of especially British significance. Although some of the types adopted in the mints of Carausius are peculiarly his own, as, for instance, that of EXPECTATE VENI, yet in other cases the reverse types seem to be mere adaptations of those of some of his predecessors, such as the PAX AVG. of Gallienus, the CONCORDIA MILITVM of Marius, the ADVENTVS AVG. of Probus, the SAECVLI FELICITAS and other types of Postumus. The misreading of DEVSENIENSI for DEVSONIENSI is also quite in accordance with this view.

Mr. Arnold has supplemented an account of the Roman coins which have been found in considerable abundance at Springhead, near Southfleet, the site of the Roman station of Vagniacæ, given us by Mr. C. Roach Smith. Various Roman remains from this spot have been described in the *Collectanea Antiqua*, as well as some ancient British and Saxon coins there found. Some of these have in former times been exhibited at meetings of this Society.

We have also received some other accounts of the finding of hoards of Roman coins. One of these, described by Mr. Frank Latchmore, was recently discovered in the neighbourhood of Cambridge, and consisted of about 2,500 base denarii, extending from the time of Gordian III to the commencement of the reign of Aurelian. The coinage of Gallienus, Postumus, Victorinus, Claudius Gothicus, and the two Tetrici was largely represented, so that the hoard belongs to much the same category as numerous other hoards that have from time to time been found in different parts of Gaul and Britain. Some few coins of Lælianus, an emperor rarely represented in English finds, were present in the hoard.

Another discovery, communicated to us by Mr. Talbot Ready, by permission of the Duke of Rutland, was made so long ago as 1871, when ninety-nine silver coins were found at Sproxton, in Leicestershire. These ranged from the time of Constantius II to that of Arcadius, so that this hoard also belongs to a period

frequently represented by discoveries in Britain, and is but little removed in time from the East Harptree hoard, of which I gave some account last year.

Another small hoard of coins from the Great Orme's Head, near Llandudno, has been recorded by Dr. Head. The remarkable feature in this case is the large proportion of the coins of Carausius present in the hoard, thirteen of the seventeen coins found bearing the impress of that emperor.

I am glad to say that during the past session English numismatics have occupied a good share of our attention. Numerous rare and interesting English coins have been exhibited at our meetings, and we have had several papers of greater or less importance on subjects relating to the English series. Mr. Montagu has published in the *Chronicle* the first known example of the half-noble of the third coinage of Edward III. The noble of this issue, though rare, is well known, and the quarter-noble is of not uncommon occurrence. The only half-noble attributed to this coinage was that described and figured by Mr. Kenyon in his *Gold Coins of England*, the claims of which to rank as belonging to the third issue of Edward cannot, in the opinion of Mr. Montagu, or in my own, be maintained. The principal argument in its favour is its heavy weight, but this cannot avail against a total disaccordance in detail with the noble of which it has been presumed to be the half. Mr. Montagu's coin, on the other hand, though nearly ten grains below the proper weight, presents all the minute analogies in lettering and otherwise that ought to be present in a coin issued at the same time as the noble of 1346. Mr. Montagu may well be complimented on his acumen in identifying the coin, and thus filling another of the gaps that existed in the English series. Mr. Montagu has also called our attention to a penny of Stephen that appears to have been undoubtedly struck in the mint of Castle Rising, Norfolk, the reverse legend being *HIVN ON RISINGE*. The attribution of Saxon coins to this mint seems at best but doubtful. The *RIC*, which has

been thought by Hildebrand to typify Castle Rising, or possibly Richborough (? Risborough) in Buckinghamshire, may with more probability be regarded as significant of Richborough near Sandwich.

In another paper Mr. Montagu has added about forty new varieties to the coinage of James I, as described in the lists of that king's coins and mint-marks previously published.

An equally experienced and observant antiquary, Mr. W. H. D. Longstaffe, after some years' silence, has again addressed two papers to the Society. In one of these he shows cause why the Reading penny, notwithstanding the obverse legend, should be attributed to Edward III, rather than to Edward I, and in the other he discusses the curious groat in the British Museum bearing the name of Richard, but having a bust with an arched crown like that on the early coins of Henry VII. In Kenyon's edition of Hawkins's *Silver Coins*, this piece is engraved as being of Richard III. Mr. Longstaffe, however, suggests that it may be a groat struck for Perkin Warbeck under his assumed title of Richard IV. The suggestion is ingenious, but the character of the coin is more in favour of its being regarded as a forgery of the time of Henry VII, on which, from some fancied security in not taking the name of the reigning monarch in vain, Richard was substituted for Henry. Some feeling of the same kind may have actuated the engraver of the dies for a half-groat bearing Richard's name, figured by Hawkins's No. 358, which is also probably a forgery, and more likely contemporary with Henry VII, than with his predecessor.

On the question of the succession of mint-marks on the coinage of Henry VII, the Rev. G. F. Crowther has furnished us with another paper throwing further light on a somewhat obscure subject.

Reverting to somewhat earlier times, I may refer to the paper by Mr. A. E. Packe, in which he expressed an opinion that the angels and half-angels struck by Henry VI on his

restoration in 1470, preceded those with the cross mint-mark, and suggested that the coins with the lis mint-mark were struck at York. This view is supported by the fact that the lis is the York mint-mark on the silver coins struck under Henry after his restoration. These, however, generally have Ⓔ on the king's breast. Looking at the fact that the Bristol angel of Henry VI is designated by a B, and that no York angels of Henry with a corresponding Ⓔ are known, looking also at the circumstance that no Bristol half-angels have as yet been seen, it is difficult to accept the conclusion that all the extant half-angels of Henry VI should have been struck in the country mint of York, where no angels can be proved to have been coined, and not in the mint of London, where Henry's principal gold coins were struck.

The only other notice of the English coinage to which I need refer is a short note by myself on the light thrown by early Bills of Indictment on the names by which certain denominations of money were commonly known.

As to the Medals of the United Kingdom, Mr. Grueber has been good enough to continue his notices of English Personal Medals from 1760, bringing them down so far as the letter C, and Mr. Cochran Patrick has supplemented his Catalogue of the Medals of Scotland by a list of those, principally of modern date, with which he has become acquainted since the publication of his great work in 1884.

Mr. A. Prevost has favoured us with an account of the curious series of medals or coins which were annually issued as prizes to marksmen at the Swiss national rifle meetings from 1842 to 1885; and, in Oriental numismatics, we have had an important paper on the Coins of the Durrani dynasty in Khorasan, from the pen of Mr. M. Longworth Dames.

It is thus abundantly evident that our Society has exhibited much activity during the past year, and those who have attended our meetings have usually had the privilege of having some coins of interest laid before them for inspection, in addition to

gaining some information from the discussion of the papers that have been read.

As to the Numismatic publications of the past year, I must mention that the Dictionary of Roman Coins, undertaken many years ago by the late Mr. Seth Stevenson, and in great part printed during his lifetime, has at length appeared in a complete form. For this we are indebted to a former Secretary of this Society, Mr. F. W. Madden, to whom the work was entrusted by the publishers. A part of the volume was also revised by our valued member, Mr. C. Roach Smith, while most of the illustrations are from the pencil of the late Mr. Fairholt, who for many years took a most active part in our proceedings. The volume has, therefore, many personal recommendations to the older generation of our members apart from its intrinsic merits. To the student of the Roman coinage the work will be found of great usefulness and value, and though in some instances the information it contains is not quite abreast of the times, this volume supplies an enormous quantity of facts in convenient form, and fills a gap in numismatic literature which has long been acknowledged to exist.

Of British Museum Catalogues that of the Coins of Corinth and its colonies, with no less than thirty-nine plates, has been published, compiled by Dr. Head. This volume completes the series of catalogues relating to the coinage of European Greece, which now, including the catalogues of the Seleucidæ and the Ptolemies, extends to twelve volumes.

The Catalogue of the Coins and Tokens of the Possessions and Colonies of the British Isles, by Mr. James Atkins, supplies a long-felt want. It has already been noticed in the *Chronicle* by Dr. Codrington. Some recent foreign publications have also been reviewed in the pages of the *Chronicle*.

Altogether the study and the collection of coins appear to be carried on with at least the activity of former years. Indeed, to judge by the prices that English coins have of late fetched at

public sales, the zeal for collecting seems to have gone beyond the limits of what were formerly known as the bounds of discretion. The importance that now attaches to small variations in comparatively modern coins has at all events the power of ensuring their preservation to future generations; but the desire to possess some specimen, the rarity of which is solely due to some mechanical detail and not to any historical cause, is hardly the highest form that numismatic ardour should be capable of assuming. Coins, as contemporary monuments of the past, as preserving for all time the portraiture and memories of men and events long since past away, as correctors of history, and as throwing light on the customs, religions, and commerce of former times, are of the highest interest and value. To fill a gap in a series, to obtain an authentic memorial of some stirring event, to illustrate the history of the mint in some particular locality, are objects for which an occasional pecuniary extravagance may be not only justifiable but laudable. But to purchase works of inferior artists of modern times, the only merit of which is that they are rare, at prices far exceeding those at which the finest monuments of Grecian or Roman art, replete moreover with historic interest, can be obtained, arises from a phase of numismatic ardour with which I for one must confess that I have little sympathy. It is not on the existence of such coins as those which at the present day are commanding the highest prices that the study of numismatics or the most valuable of the contributions to the *Numismatic Chronicle* can in any way be said to depend; and I am glad to think that amid all the excitement and competition attending a modern sale of coins, the older and more historically interesting pieces are by no means neglected, and that though the passion for possessing what none or but few others may have, is strong, the genuine respect of collectors for what is of historic and artistic value is by no means less intense than it was a generation ago.

The Meeting then proceeded to ballot for the Officers of the ensuing year, when the following gentlemen were elected :—

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F.G.S.

Vice-Presidents.

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LIST OF MEMBERS
OF THE
NUMISMATIC SOCIETY
OF LONDON.
DECEMBER, 1889.



LIST OF MEMBERS
OF THE
NUMISMATIC SOCIETY
OF LONDON,
DECEMBER, 1889.

An Asterisk prefixed to a name indicates that the Member has compounded for his annual contribution.

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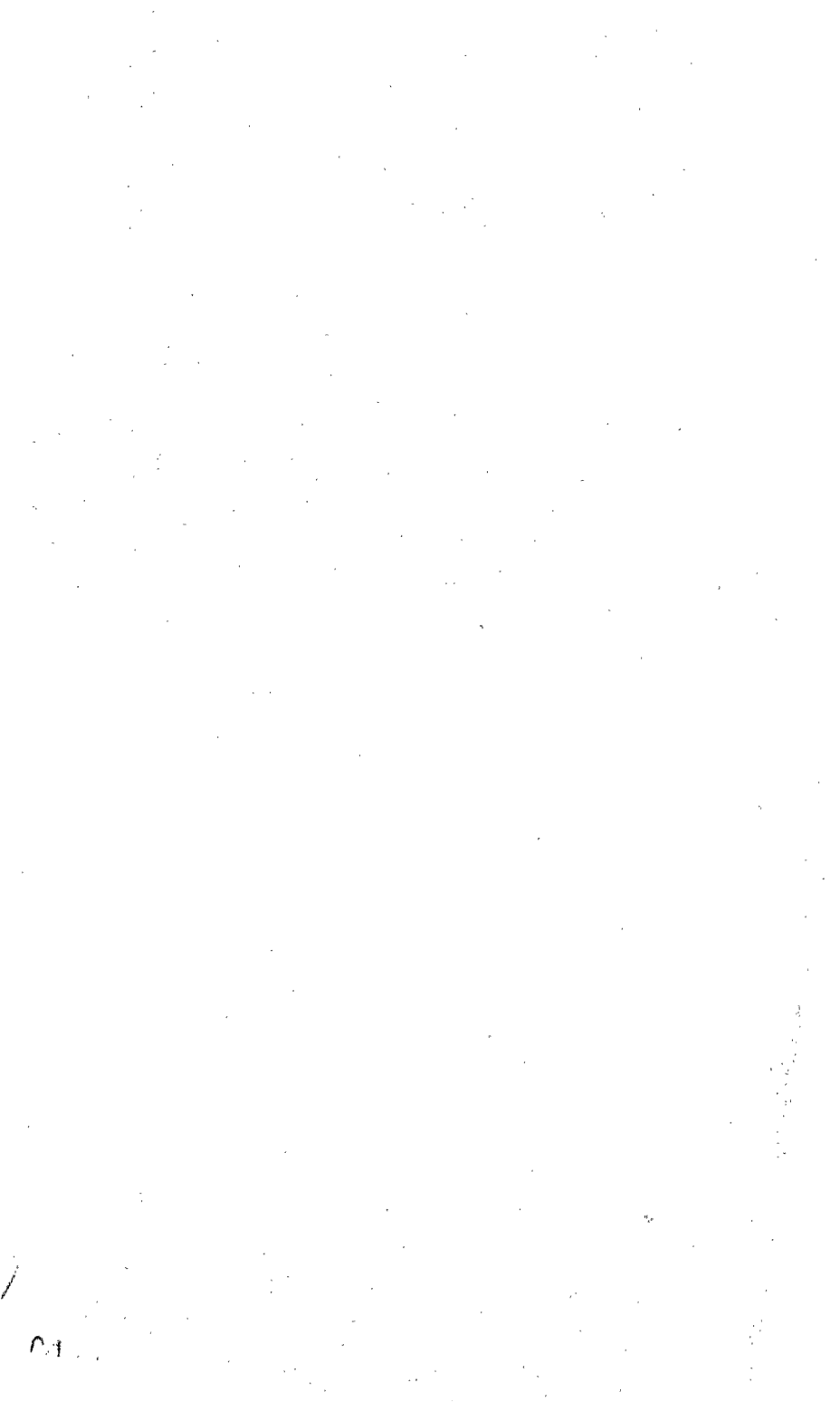
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